



Sequence Listing

<110> Genentech, Inc.
Eaton, Dan L.
Filvaroff, Ellen
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

<120> SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
ACIDS ENCODING THE SAME

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<141> 2002-05-02

<150> PCT/US00/23328
<151> 2000-08-24

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<150> PCT/US00/04341
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Val	Thr	Leu	His	His	Ile	Asp	Pro	Ala	Leu	Pro	Tyr	Ile	Ser	Asp		35	40	45	
Thr	Gly	Thr	Val	Ala	Pro	Glu	Lys	Cys	Leu	Phe	Gly	Ala	Met	Leu		50	55	60	
Asn	Ile	Ala	Ala	Val	Leu	Cys	Ile	Ala	Thr	Ile	Tyr	Val	Arg	Tyr		65	70	75	
Lys	Gln	Val	His	Ala	Leu	Ser	Pro	Glu	Glu	Asn	Val	Ile	Ile	Lys		80	85	90	
Leu	Asn	Lys	Ala	Gly	Leu	Val	Leu	Gly	Ile	Leu	Ser	Cys	Leu	Gly		95	100	105	
Leu	Ser	Ile	Val	Ala	Asn	Phe	Gln	Lys	Thr	Thr	Leu	Phe	Ala	Ala		110	115	120	
His	Val	Ser	Gly	Ala	Val	Leu	Thr	Phe	Gly	Met	Gly	Ser	Leu	Tyr		125	130	135	
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Cys	Gly	Val	Ser	Ala	Leu	Ser	Met	Leu	Thr	Cys	Ser	Ser	Val	Leu		170	175	180	
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Tyr	Ile	Arg	Asp	Phe	Gln	Lys	Ile	Ser	Leu	Arg	Val	Glu	Ala	Asn		230	235	240	
Leu	His	Gly	Leu	Thr	Leu	Tyr	Asp	Thr	Ala	Pro	Cys	Pro	Ile	Asn		245	250	255	
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Lys	Asp	Tyr	Glu	Ile	Arg	Gln	Tyr	Val	Val	Gln	Val	Ile	Phe	Ser	35	40	45	
Val	Thr	Phe	Ala	Phe	Ser	Cys	Thr	Met	Phe	Glu	Leu	Ile	Ile	Phe	50	55	60	
Glu	Ile	Leu	Gly	Val	Leu	Asn	Ser	Ser	Ser	Arg	Tyr	Phe	His	Trp	65	70	75	
Lys	Met	Asn	Leu	Cys	Val	Ile	Leu	Leu	Ile	Leu	Val	Phe	Met	Val	80	85	90	
Pro	Phe	Tyr	Ile	Gly	Tyr	Phe	Ile	Val	Ser	Asn	Ile	Arg	Leu	Leu	95	100	105	
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Phe Val Ser Ser	Val Leu Leu Ile Arg	Met Ser Met Pro Leu	Glu
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Tyr Arg Thr Ile	Ile Thr Glu Val Leu	Gly Glu Leu Gln Phe	Asn
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 35 40 45
 Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala
 50 55 60
 Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu
 65 70 75
 Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val
 80 85 90
 Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys
 95 100 105
 Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val
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 Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp
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Asp	Ser	Thr	Tyr	Ser	Val	Ala	Ser	Pro	Tyr	Ser	Thr	Ile	Pro	Ala	
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Pro	Thr	Thr	Thr	Pro	Pro	Ala	Pro	Ala	Ser	Thr	Ser	Ile	Pro	Arg	
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Arg	Lys	Lys	Leu	Ile	Cys	Val	Thr	Glu	Val	Phe	Met	Glu	Thr	Ser	
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Asp	Lys	Asn	Pro	Glu	Glu	Ser	Lys	Ser	Pro	Ser	Lys	Thr	Thr	Val	
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gaaggagaat gggatttttc ttgaggcatg cacatctgga attaagggtca 2050

aactaattct cacatccctc taaaagtaaa ctactgtag gaacagcagt 2100
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caattatcaa ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac 2350
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tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450
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<211> 350
<212> PRT
<213> Homo Sapien

<400> 8
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Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala
35 40 45
Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp
50 55 60
Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu
65 70 75
Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu
80 85 90
Pro Pro Ser Tyr His Asn Glu Thr Asn Thr Asp Thr Lys Val Gly
95 100 105
Asn Asn Thr Ile His Val His Arg Glu Ile His Lys Ile Thr Asn
110 115 120
Asn Gln Thr Gly Gln Met Val Phe Ser Glu Thr Val Ile Thr Ser
125 130 135
Val Gly Asp Glu Glu Gly Arg Arg Ser His Glu Cys Ile Ile Asp
140 145 150
Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln Phe Ala Ser Phe Gln
155 160 165
Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met Leu Cys Thr Arg
170 175 180

Asp	Ser	Glu	Cys	Cys	Gly	Asp	Gln	Leu	Cys	Val	Trp	Gly	His	Cys	
				185					190					195	
Thr	Lys	Met	Ala	Thr	Arg	Gly	Ser	Asn	Gly	Thr	Ile	Cys	Asp	Asn	
				200					205					210	
Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg	Gly	
				215					220					225	
Leu	Leu	Phe	Pro	Val	Cys	Thr	Pro	Leu	Pro	Val	Glu	Gly	Glu	Leu	
				230					235					240	
Cys	His	Asp	Pro	Ala	Ser	Arg	Leu	Leu	Asp	Leu	Ile	Thr	Trp	Glu	
				245					250					255	
Leu	Glu	Pro	Asp	Gly	Ala	Leu	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly	
				260					265					270	
Leu	Leu	Cys	Gln	Pro	His	Ser	His	Ser	Leu	Val	Tyr	Val	Cys	Lys	
				275					280					285	
Pro	Thr	Phe	Val	Gly	Ser	Arg	Asp	Gln	Asp	Gly	Glu	Ile	Leu	Leu	
				290					295					300	
Pro	Arg	Glu	Val	Pro	Asp	Glu	Tyr	Glu	Val	Gly	Ser	Phe	Met	Glu	
				305					310					315	
Glu	Val	Arg	Gln	Glu	Leu	Glu	Asp	Leu	Glu	Arg	Ser	Leu	Thr	Glu	
				320					325					330	
Glu	Met	Ala	Leu	Gly	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Leu	Leu	
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 <211> 1395
 <212> DNA
 <213> Homo Sapien

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<210> 10
 <211> 321
 <212> PRT
 <213> Homo Sapien

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 35 40 45
 Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
 50 55 60
 Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
 65 70 75
 Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro
 80 85 90
 Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr
 95 100 105
 Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu
 110 115 120

Thr	Leu	Val	Gln	Ile	Ala	Arg	Val	Ile	Leu	Glu	Tyr	Ile	Asp	His
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Lys	Leu	Arg	Gly	Val	Gln	Asn	Pro	Val	Ala	Arg	Cys	Ile	Met	Cys
				140					145					150
Cys	Phe	Lys	Cys	Cys	Leu	Trp	Cys	Leu	Glu	Lys	Phe	Ile	Lys	Phe
				155					160					165
Leu	Asn	Arg	Asn	Ala	Tyr	Ile	Met	Ile	Ala	Ile	Tyr	Gly	Lys	Asn
				170					175					180
Phe	Cys	Val	Ser	Ala	Lys	Asn	Ala	Phe	Met	Leu	Leu	Met	Arg	Asn
				185					190					195
Ile	Val	Arg	Val	Val	Val	Leu	Asp	Lys	Val	Thr	Asp	Leu	Leu	Leu
				200					205					210
Phe	Phe	Gly	Lys	Leu	Leu	Val	Val	Gly	Gly	Val	Gly	Val	Leu	Ser
				215					220					225
Phe	Phe	Phe	Phe	Ser	Gly	Arg	Ile	Pro	Gly	Leu	Gly	Lys	Asp	Phe
				230					235					240
Lys	Ser	Pro	His	Leu	Asn	Tyr	Tyr	Trp	Leu	Pro	Ile	Met	Thr	Ser
				245					250					255
Ile	Leu	Gly	Ala	Tyr	Val	Ile	Ala	Ser	Gly	Phe	Phe	Ser	Val	Phe
				260					265					270
Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe	Leu	Glu	Asp	Leu
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Glu	Arg	Asn	Asn	Gly	Ser	Leu	Asp	Arg	Pro	Tyr	Tyr	Met	Ser	Lys
				290					295					300
Ser	Leu	Leu	Lys	Ile	Leu	Gly	Lys	Lys	Asn	Glu	Ala	Pro	Pro	Asp
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Asn	Lys	Lys	Arg	Lys	Lys									
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<210> 11
 <211> 1901
 <212> DNA
 <213> Homo Sapien

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a 1901

<210> 12

<211> 457
 <212> PRT
 <213> Homo Sapien

<400> 12

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Cys	Leu	Cys	Gly	Ser	Ala	Pro	Cys	Ile	Leu	Cys	Ser	Cys	Cys	Pro	
				20					25					30	
Ala	Ser	Arg	Asn	Ser	Thr	Val	Ser	Arg	Leu	Ile	Phe	Thr	Phe	Phe	
				35					40					45	
Leu	Phe	Leu	Gly	Val	Leu	Val	Ser	Ile	Ile	Met	Leu	Ser	Pro	Gly	
				50					55					60	
Val	Glu	Ser	Gln	Leu	Tyr	Lys	Leu	Pro	Trp	Val	Cys	Glu	Glu	Gly	
				65					70					75	
Ala	Gly	Ile	Pro	Thr	Val	Leu	Gln	Gly	His	Ile	Asp	Cys	Gly	Ser	
				80					85					90	
Leu	Leu	Gly	Tyr	Arg	Ala	Val	Tyr	Arg	Met	Cys	Phe	Ala	Thr	Ala	
				95					100					105	
Ala	Phe	Phe	Phe	Phe	Phe	Phe	Thr	Leu	Leu	Met	Leu	Cys	Val	Ser	
				110					115					120	
Ser	Ser	Arg	Asp	Pro	Arg	Ala	Ala	Ile	Gln	Asn	Gly	Phe	Trp	Phe	
				125					130					135	
Phe	Lys	Phe	Leu	Ile	Leu	Val	Gly	Leu	Thr	Val	Gly	Ala	Phe	Tyr	
				140					145					150	
Ile	Pro	Asp	Gly	Ser	Phe	Thr	Asn	Ile	Trp	Phe	Tyr	Phe	Gly	Val	
				155					160					165	
Val	Gly	Ser	Phe	Leu	Phe	Ile	Leu	Ile	Gln	Leu	Val	Leu	Leu	Ile	
				170					175					180	
Asp	Phe	Ala	His	Ser	Trp	Asn	Gln	Arg	Trp	Leu	Gly	Lys	Ala	Glu	
				185					190					195	
Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr	
				200					205					210	
Leu	Leu	Phe	Tyr	Leu	Leu	Ser	Ile	Ala	Ala	Val	Ala	Leu	Met	Phe	
				215					220					225	
Met	Tyr	Tyr	Thr	Glu	Pro	Ser	Gly	Cys	His	Glu	Gly	Lys	Val	Phe	
				230					235					240	
Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala	
				245					250					255	
Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu	
				260					265					270	
Gln	Ala	Ser	Val	Ile	Thr	Leu	Tyr	Thr	Met	Phe	Val	Thr	Trp	Ser	
				275					280					285	
Ala	Leu	Ser	Ser	Ile	Pro	Glu	Gln	Lys	Cys	Asn	Pro	His	Leu	Pro	

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305	310	315
Glu Thr Gln Trp Trp Asp Ala Pro Ser	Ile Val Gly Leu Ile Ile	
320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser	Leu Arg Ser Ser Asp His	
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr	Glu Glu Cys Pro Pro Met	
350	355	360
Leu Asp Ala Thr Gln Gln Gln Gln Gln	Gln Val Ala Ala Cys Glu	
365	370	375
Gly Arg Ala Phe Asp Asn Glu Gln Asp	Gly Val Thr Tyr Ser Tyr	
380	385	390
Ser Phe Phe His Phe Cys Leu Val Leu	Ala Ser Leu His Val Met	
395	400	405
Met Thr Leu Thr Asn Trp Tyr Lys Pro	Gly Glu Thr Arg Lys Met	
410	415	420
Ile Ser Thr Trp Thr Ala Val Trp Val	Lys Ile Cys Ala Ser Trp	
425	430	435
Ala Gly Leu Leu Leu Tyr Leu Trp Thr	Leu Val Ala Pro Leu Leu	
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Leu Arg Asn Arg Asp Phe Ser		
455		

<210> 13
 <211> 1572
 <212> DNA
 <213> Homo Sapien

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<210> 14
 <211> 234
 <212> PRT
 <213> Homo Sapien

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 Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys
 35 40 45
 Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr
 50 55 60
 Phe Asp Leu Leu Phe Val Thr Leu Leu Trp Ile Ile Glu Leu Asn
 65 70 75

Val	Asn	Gly	Gly	Ile	Glu	Asn	Thr	Leu	Glu	Lys	Glu	Val	Met	Gln	80	85	90
Tyr	Asp	Tyr	Tyr	Ser	Ser	Tyr	Phe	Asp	Ile	Phe	Leu	Leu	Ala	Val	95	100	105
Phe	Arg	Phe	Lys	Val	Leu	Ile	Leu	Ala	Tyr	Ala	Val	Cys	Arg	Leu	110	115	120
Arg	His	Trp	Trp	Ala	Ile	Ala	Leu	Thr	Thr	Ala	Val	Thr	Ser	Ala	125	130	135
Phe	Leu	Leu	Ala	Lys	Val	Ile	Leu	Ser	Lys	Leu	Phe	Ser	Gln	Gly	140	145	150
Ala	Phe	Gly	Tyr	Val	Leu	Pro	Ile	Ile	Ser	Phe	Ile	Leu	Ala	Trp	155	160	165
Ile	Glu	Thr	Trp	Phe	Leu	Asp	Phe	Lys	Val	Leu	Pro	Gln	Glu	Ala	170	175	180
Glu	Glu	Glu	Asn	Arg	Leu	Leu	Ile	Val	Gln	Asp	Ala	Ser	Glu	Arg	185	190	195
Ala	Ala	Leu	Ile	Pro	Gly	Gly	Leu	Ser	Asp	Gly	Gln	Phe	Tyr	Ser	200	205	210
Pro	Pro	Glu	Ser	Glu	Ala	Gly	Ser	Glu	Glu	Ala	Glu	Glu	Lys	Gln	215	220	225
Asp	Ser	Glu	Lys	Pro	Leu	Leu	Glu	Leu							230		

<210> 15

<211> 2768

<212> DNA

<213> Homo Sapien

<400> 15

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 gatggggcag gggacacggc ccagccctac accagtcacg ccgaggccac 1500
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<210> 16
 <211> 673
 <212> PRT
 <213> Homo Sapien

<400> 16
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 Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys
 20 25 30
 Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
 35 40 45
 Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
 50 55 60
 Glu Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu
 65 70 75
 Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
 80 85 90
 Leu Pro Ser Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu
 95 100 105
 Asp Leu Thr Ala Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe
 110 115 120
 Arg Gly Leu Arg Arg Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg
 125 130 135
 Ile Arg His Ile Gln Pro Gly Ala Phe Asp Thr Leu Asp Arg Leu
 140 145 150
 Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu Arg Ala Leu Pro Pro
 155 160 165

Leu Arg Leu Pro	Arg	Leu Leu Leu Leu	Asp	Leu Ser His Asn Ser
	170		175	180
Leu Leu Ala Leu	Glu	Pro Gly Ile Leu	Asp Thr Ala Asn Val Glu	
	185		190	195
Ala Leu Arg Leu	Ala Gly Leu Gly Leu	Gln Gln Leu Asp Glu Gly		
	200		205	210
Leu Phe Ser Arg	Leu Arg Asn Leu His	Asp Leu Asp Val Ser Asp		
	215		220	225
Asn Gln Leu Glu	Arg Val Pro Pro Val	Ile Arg Gly Leu Arg Gly		
	230		235	240
Leu Thr Arg Leu	Arg Leu Ala Gly Asn	Thr Arg Ile Ala Gln Leu		
	245		250	255
Arg Pro Glu Asp	Leu Ala Gly Leu Ala	Ala Leu Gln Glu Leu Asp		
	260		265	270
Val Ser Asn Leu	Ser Leu Gln Ala Leu	Pro Gly Asp Leu Ser Gly		
	275		280	285
Leu Phe Pro Arg	Leu Arg Leu Leu Ala	Ala Ala Arg Asn Pro Phe		
	290		295	300
Asn Cys Val Cys	Pro Leu Ser Trp Phe	Gly Pro Trp Val Arg Glu		
	305		310	315
Ser His Val Thr	Leu Ala Ser Pro Glu	Glu Thr Arg Cys His Phe		
	320		325	330
Pro Pro Lys Asn	Ala Gly Arg Leu Leu	Leu Glu Leu Asp Tyr Ala		
	335		340	345
Asp Phe Gly Cys	Pro Ala Thr Thr Thr	Thr Ala Thr Val Pro Thr		
	350		355	360
Thr Arg Pro Val	Val Arg Glu Pro Thr	Ala Leu Ser Ser Ser Leu		
	365		370	375
Ala Pro Thr Trp	Leu Ser Pro Thr Ala	Pro Ala Thr Glu Ala Pro		
	380		385	390
Ser Pro Pro Ser	Thr Ala Pro Pro Thr	Val Gly Pro Val Pro Gln		
	395		400	405
Pro Gln Asp Cys	Pro Pro Ser Thr Cys	Leu Asn Gly Gly Thr Cys		
	410		415	420
His Leu Gly Thr	Arg His His Leu Ala	Cys Leu Cys Pro Glu Gly		
	425		430	435
Phe Thr Gly Leu	Tyr Cys Glu Ser Gln	Met Gly Gln Gly Thr Arg		
	440		445	450
Pro Ser Pro Thr	Pro Val Thr Pro Arg	Pro Pro Arg Ser Leu Thr		
	455		460	465
Leu Gly Ile Glu	Pro Val Ser Pro Thr	Ser Leu Arg Val Gly Leu		
	470		475	480

Gln	Arg	Tyr	Leu	Gln	Gly	Ser	Ser	Val	Gln	Leu	Arg	Ser	Leu	Arg	485	490	495
Leu	Thr	Tyr	Arg	Asn	Leu	Ser	Gly	Pro	Asp	Lys	Arg	Leu	Val	Thr	500	505	510
Leu	Arg	Leu	Pro	Ala	Ser	Leu	Ala	Glu	Tyr	Thr	Val	Thr	Gln	Leu	515	520	525
Arg	Pro	Asn	Ala	Thr	Tyr	Ser	Val	Cys	Val	Met	Pro	Leu	Gly	Pro	530	535	540
Gly	Arg	Val	Pro	Glu	Gly	Glu	Glu	Ala	Cys	Gly	Glu	Ala	His	Thr	545	550	555
Pro	Pro	Ala	Val	His	Ser	Asn	His	Ala	Pro	Val	Thr	Gln	Ala	Arg	560	565	570
Glu	Gly	Asn	Leu	Pro	Leu	Leu	Ile	Ala	Pro	Ala	Leu	Ala	Ala	Val	575	580	585
Leu	Leu	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ala	Ala	Tyr	Cys	Val	Arg	590	595	600
Arg	Gly	Arg	Ala	Met	Ala	Ala	Ala	Ala	Gln	Asp	Lys	Gly	Gln	Val	605	610	615
Gly	Pro	Gly	Ala	Gly	Pro	Leu	Glu	Leu	Glu	Gly	Val	Lys	Val	Pro	620	625	630
Leu	Glu	Pro	Gly	Pro	Lys	Ala	Thr	Glu	Gly	Gly	Gly	Glu	Ala	Leu	635	640	645
Pro	Ser	Gly	Ser	Glu	Cys	Glu	Val	Pro	Leu	Met	Gly	Phe	Pro	Gly	650	655	660
Pro	Gly	Leu	Gln	Ser	Pro	Leu	His	Ala	Lys	Pro	Tyr	Ile			665	670	

<210> 17
 <211> 1672
 <212> DNA
 <213> Homo Sapien

<400> 17
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 tgctgctgag cttggcctcg gcgtcctcgg atgaagaagg cagccaggat 150
 gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200
 ccatactact gcaggcagag tagttgctgg tcaaataattt cttgattcag 250
 aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300
 agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350
 aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaaccag 400
 ctttgaccgc cattgaaggc acagcacatg gggagccctg ccacttcctt 450

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tttcttttcc tagataagga gtatgatgaa tgtacatcag atgggagggga 500
agatggcaga ctgtggtgtg ctacaaccta tgactacaaa gcagatgaaa 550
agtgggggctt ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600
caggaagcag aaatgatgta tcaaactgga atgaaaatcc ttaatggaag 650
caataagaaa agccaaaaaa gagaagcata tcggtatctc caaaaggcag 700
caagcatgaa ccataccaaa gccctggaga gagtgtcata tgctctttta 750
tttggtgatt acttgccaca gaatatccag gcagcgagag agatgtttga 800
gaagctgact gaggaaggct ctcccaaggg acagactgct cttggctttc 850
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gtggtttata gcggccacaa ctttttcagc tttcatgatc cagatttgct 1050
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gatataacac atggaatcta catgtaaag aaagttggtg gagtccacaa 1150
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tgataaatgg ctctttttta attttctctg agttggaatt gtcagaatca 1250
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attttgcaac aatgccctaa gaattgttaa aattcatgga gttatttggtg 1400
cagaatgact ccagagagct ctactttctg ttttttactt ttcatgattg 1450
gctgtcttcc catttattct ggatcatttat tgctagtgc actgtgcctg 1500
cttcagtag tctcattttc cctattttgc taatttgta ctttttcttt 1550
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaaa aaaaaaaaaa aa 1672

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<210> 18
<211> 301
<212> PRT
<213> Homo Sapien

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<400> 18
Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu
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Leu Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp
             20             25             30
Glu Ser Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val

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35					40					45				
Lys	Asp	His	Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe
				50					55					60
Leu	Asp	Ser	Glu	Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu
				65					70					75
Glu	Asp	Ser	Leu	Lys	Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp
				80					85					90
Ile	Ser	Phe	Leu	Glu	Ser	Pro	Asn	Pro	Glu	Asn	Lys	Asp	Tyr	Glu
				95					100					105
Glu	Pro	Lys	Lys	Val	Arg	Lys	Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly
				110					115					120
Thr	Ala	His	Gly	Glu	Pro	Cys	His	Phe	Pro	Phe	Leu	Phe	Leu	Asp
				125					130					135
Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg
				140					145					150
Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp
				155					160					165
Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met
				170					175					180
Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn
				185					190					195
Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	Tyr	Leu
				200					205					210
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val
				215					220					225
Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln
				230					235					240
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro
				245					250					255
Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly
				260					265					270
Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly
				275					280					285
Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg
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<210> 19
 <211> 1508
 <212> DNA
 <213> Homo Sapien

<400> 19
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aggggggaaaa atgctctttt ggggtgctagg cctcctaata ctctgtgggt 150
ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
tacattttta tcaactggatg tgactcgggc tttggaaact tggcagccag 250
aacttttgat aaaaagggat ttcattgtaat cgctgcctgt ctgactgaat 300
caggatcaac agcttttaaag gcagaaacct cagagagact tcgtactgtg 350
cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
gaagaaccaa gttggggaga aaggtctctg gggctctgatc aataatgctg 450
gtgttccccg cgtgctggct cccactgact ggctgacact agaggactac 500
agagaaccta ttgaagtga cctgtttgga ctcatcagtg tgacactaaa 550
tatgcttcct ttggtcaaga aagctcaagg gagagtatt aatgtctcca 600
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tggtgtgcac gtctcatgca ttgaaccagg attgttcaaa acaaacttgg 750
cagatccagt aaaggtatt gaaaaaaaaac tcgccatttg ggagcagctg 800
tctccagaca tcaaacaaca atatggagaa gggtacattg aaaaaagtct 850
agacaaactg aaaggcaata aatcctatgt gaacatggac ctctctccgg 900
tggtagagtg catggaccac gctctaaca gtctcttccc taagactcat 950
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tatgaaattg gccgatttca agaacacatc tccttttcaa cccatttct 1150
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aaaaaaaa 1508

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<210> 20
<211> 319
<212> PRT

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<213> Homo Sapien

<400> 20

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				20					25					30	
Tyr	Ile	Phe	Ile	Thr	Gly	Cys	Asp	Ser	Gly	Phe	Gly	Asn	Leu	Ala	
				35					40					45	
Ala	Arg	Thr	Phe	Asp	Lys	Lys	Gly	Phe	His	Val	Ile	Ala	Ala	Cys	
				50					55					60	
Leu	Thr	Glu	Ser	Gly	Ser	Thr	Ala	Leu	Lys	Ala	Glu	Thr	Ser	Glu	
				65					70					75	
Arg	Leu	Arg	Thr	Val	Leu	Leu	Asp	Val	Thr	Asp	Pro	Glu	Asn	Val	
				80					85					90	
Lys	Arg	Thr	Ala	Gln	Trp	Val	Lys	Asn	Gln	Val	Gly	Glu	Lys	Gly	
				95					100					105	
Leu	Trp	Gly	Leu	Ile	Asn	Asn	Ala	Gly	Val	Pro	Gly	Val	Leu	Ala	
				110					115					120	
Pro	Thr	Asp	Trp	Leu	Thr	Leu	Glu	Asp	Tyr	Arg	Glu	Pro	Ile	Glu	
				125					130					135	
Val	Asn	Leu	Phe	Gly	Leu	Ile	Ser	Val	Thr	Leu	Asn	Met	Leu	Pro	
				140					145					150	
Leu	Val	Lys	Lys	Ala	Gln	Gly	Arg	Val	Ile	Asn	Val	Ser	Ser	Val	
				155					160					165	
Gly	Gly	Arg	Leu	Ala	Ile	Val	Gly	Gly	Gly	Tyr	Thr	Pro	Ser	Lys	
				170					175					180	
Tyr	Ala	Val	Glu	Gly	Phe	Asn	Asp	Ser	Leu	Arg	Arg	Asp	Met	Lys	
				185					190					195	
Ala	Phe	Gly	Val	His	Val	Ser	Cys	Ile	Glu	Pro	Gly	Leu	Phe	Lys	
				200					205					210	
Thr	Asn	Leu	Ala	Asp	Pro	Val	Lys	Val	Ile	Glu	Lys	Lys	Leu	Ala	
				215					220					225	
Ile	Trp	Glu	Gln	Leu	Ser	Pro	Asp	Ile	Lys	Gln	Gln	Tyr	Gly	Glu	
				230					235					240	
Gly	Tyr	Ile	Glu	Lys	Ser	Leu	Asp	Lys	Leu	Lys	Gly	Asn	Lys	Ser	
				245					250					255	
Tyr	Val	Asn	Met	Asp	Leu	Ser	Pro	Val	Val	Glu	Cys	Met	Asp	His	
				260					265					270	
Ala	Leu	Thr	Ser	Leu	Phe	Pro	Lys	Thr	His	Tyr	Ala	Ala	Gly	Lys	
				275					280					285	
Asp	Ala	Lys	Ile	Phe	Trp	Ile	Pro	Leu	Ser	His	Met	Pro	Ala	Ala	
				290					295					300	

Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn
 305 310 315

Pro Lys Ala Val

<210> 21
 <211> 1849
 <212> DNA
 <213> Homo Sapien

<400> 21
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 acggaagggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
 tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
 agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
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 tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
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 aaatttgcaa aacatcatct aaaatttaaa aaaaaaaaaa aaaaaaaaaa 1849

<210> 22

<211> 409

<212> PRT

<213> Homo Sapien

<400> 22

Met	Glu	Gly	Glu	Ser	Thr	Ser	Ala	Val	Leu	Ser	Gly	Phe	Val	Leu	
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Gly	Ala	Leu	Ala	Phe	Gln	His	Leu	Asn	Thr	Asp	Ser	Asp	Thr	Glu	
				20					25					30	
Gly	Phe	Leu	Leu	Gly	Glu	Val	Lys	Gly	Glu	Ala	Lys	Asn	Ser	Ile	
				35					40					45	
Thr	Asp	Ser	Gln	Met	Asp	Asp	Val	Glu	Val	Val	Tyr	Thr	Ile	Asp	
				50					55					60	
Ile	Gln	Lys	Tyr	Ile	Pro	Cys	Tyr	Gln	Leu	Phe	Ser	Phe	Tyr	Asn	
				65					70					75	
Ser	Ser	Gly	Glu	Val	Asn	Glu	Gln	Ala	Leu	Lys	Lys	Ile	Leu	Ser	
				80					85					90	
Asn	Val	Lys	Lys	Asn	Val	Val	Gly	Trp	Tyr	Lys	Phe	Arg	Arg	His	
				95					100					105	
Ser	Asp	Gln	Ile	Met	Thr	Phe	Arg	Glu	Arg	Leu	Leu	His	Lys	Asn	
				110					115					120	
Leu	Gln	Glu	His	Phe	Ser	Asn	Gln	Asp	Leu	Val	Phe	Leu	Leu	Leu	
				125					130					135	
Thr	Pro	Ser	Ile	Ile	Thr	Glu	Ser	Cys	Ser	Thr	His	Arg	Leu	Glu	
				140					145					150	
His	Ser	Leu	Tyr	Lys	Pro	Gln	Lys	Gly	Leu	Phe	His	Arg	Val	Pro	
				155					160					165	
Leu	Val	Val	Ala	Asn	Leu	Gly	Met	Ser	Glu	Gln	Leu	Gly	Tyr	Lys	
				170					175					180	

Thr	Val	Ser	Gly	Ser	Cys	Met	Ser	Thr	Gly	Phe	Ser	Arg	Ala	Val	185	190	195
Gln	Thr	His	Ser	Ser	Lys	Phe	Phe	Glu	Glu	Asp	Gly	Ser	Leu	Lys	200	205	210
Glu	Val	His	Lys	Ile	Asn	Glu	Met	Tyr	Ala	Ser	Leu	Gln	Glu	Glu	215	220	225
Leu	Lys	Ser	Ile	Cys	Lys	Lys	Val	Glu	Asp	Ser	Glu	Gln	Ala	Val	230	235	240
Asp	Lys	Leu	Val	Lys	Asp	Val	Asn	Arg	Leu	Lys	Arg	Glu	Ile	Glu	245	250	255
Lys	Arg	Arg	Gly	Ala	Gln	Ile	Gln	Ala	Ala	Arg	Glu	Lys	Asn	Ile	260	265	270
Gln	Lys	Asp	Pro	Gln	Glu	Asn	Ile	Phe	Leu	Cys	Gln	Ala	Leu	Arg	275	280	285
Thr	Phe	Phe	Pro	Asn	Ser	Glu	Phe	Leu	His	Ser	Cys	Val	Met	Ser	290	295	300
Leu	Lys	Asn	Arg	His	Val	Ser	Lys	Ser	Ser	Cys	Asn	Tyr	Asn	His	305	310	315
His	Leu	Asp	Val	Val	Asp	Asn	Leu	Thr	Leu	Met	Val	Glu	His	Thr	320	325	330
Asp	Ile	Pro	Glu	Ala	Ser	Pro	Ala	Ser	Thr	Pro	Gln	Ile	Ile	Lys	335	340	345
His	Lys	Ala	Leu	Asp	Leu	Asp	Asp	Arg	Trp	Gln	Phe	Lys	Arg	Ser	350	355	360
Arg	Leu	Leu	Asp	Thr	Gln	Asp	Lys	Arg	Ser	Lys	Ala	Asn	Thr	Gly	365	370	375
Ser	Ser	Asn	Gln	Asp	Lys	Ala	Ser	Lys	Met	Ser	Ser	Pro	Glu	Thr	380	385	390
Asp	Glu	Glu	Ile	Glu	Lys	Met	Lys	Gly	Phe	Gly	Glu	Tyr	Ser	Arg	395	400	405

Ser Pro Thr Phe

<210> 23

<211> 2651

<212> DNA

<213> Homo Sapien

<400> 23

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acgagcggac cagcgcaggg cagcccaagc agcgcgcagc gaacgcccgc 100

cgcgcgccac accctctgcg gtccccgcgg cgcttgccac cttccctcc 150

ttccccgcgt cccgcctcg ccggccagtc agcttgccgg gttcgctgcc 200

ccgcgaaacc ccgaggtcac cagccgcgcg ctctgcttcc ctgggcccgcg 250

cgccgcctcc acgccctcct tctcccctgg cccggcgccct ggcaccgggg 300
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 cgctgtctcg cctcttccac caactccaac tctttctccc tccagctcca 400
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 ggcacgggttc ggcttgcccg cgcttctctg caccctggca gtgctcagcg 550
 ccgcgctgct ggctgccgag ctcaagtcga aaagttgctc ggaagtgcga 600
 cgtctttacg tgtccaaagg cttcaacaag aacgatgccc ccctccacga 650
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 agatgtccct cgcaaattga agctccaggt tactcgtgct tttgtagcag 1150
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 gatctactgc tcccactgcc ggggtctcgt gactgtgaag ccatgttaca 1300
 actactgctc aaacatcatg agaggctggt tggccaacca aggggatctc 1350
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 tttaagaagt gctgactttg ttttctcatt cagttttggg aggaaaaggg 2350
 actgtgcatt gagttgggtc ctgctcccc aaaccatgtt aaacgtggct 2400
 aacagtgtag gtacagaact atagttagtt gtgcatttgt gattttatca 2450
 ctctattatt tgtttgatg tttttttctc atttcgtttg tgggtttttt 2500
 tttccaactg tgatctcgcc ttgtttctta caagcaaacc agggtcctt 2550
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 agcaggtttt atttatcatg ttatcttatt aaaagaaaaa gcccaaaaag 2650

c 2651

<210> 24
 <211> 556
 <212> PRT
 <213> Homo Sapien

<400> 24
 Met Ala Arg Phe Gly Leu Pro Ala Leu Leu Cys Thr Leu Ala Val
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 Leu Ser Ala Ala Leu Leu Ala Ala Glu Leu Lys Ser Lys Ser Cys
 20 25 30
 Ser Glu Val Arg Arg Leu Tyr Val Ser Lys Gly Phe Asn Lys Asn
 35 40 45
 Asp Ala Pro Leu His Glu Ile Asn Gly Asp His Leu Lys Ile Cys
 50 55 60
 Pro Gln Gly Ser Thr Cys Cys Ser Gln Glu Met Glu Glu Lys Tyr
 65 70 75
 Ser Leu Gln Ser Lys Asp Asp Phe Lys Ser Val Val Ser Glu Gln
 80 85 90
 Cys Asn His Leu Gln Ala Val Phe Ala Ser Arg Tyr Lys Lys Phe
 95 100 105
 Asp Glu Phe Phe Lys Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu
 110 115 120

Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn	125	130	135
Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr	140	145	150
Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp	155	160	165
Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr	170	175	180
His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu	185	190	195
Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln	200	205	210
Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu	215	220	225
Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro	230	235	240
Thr	Ala	Gln	Cys	Thr	His	Ala	Leu	Leu	Lys	Met	Ile	Tyr	Cys	Ser	245	250	255
His	Cys	Arg	Gly	Leu	Val	Thr	Val	Lys	Pro	Cys	Tyr	Asn	Tyr	Cys	260	265	270
Ser	Asn	Ile	Met	Arg	Gly	Cys	Leu	Ala	Asn	Gln	Gly	Asp	Leu	Asp	275	280	285
Phe	Glu	Trp	Asn	Asn	Phe	Ile	Asp	Ala	Met	Leu	Met	Val	Ala	Glu	290	295	300
Arg	Leu	Glu	Gly	Pro	Phe	Asn	Ile	Glu	Ser	Val	Met	Asp	Pro	Ile	305	310	315
Asp	Val	Lys	Ile	Ser	Asp	Ala	Ile	Met	Asn	Met	Gln	Asp	Asn	Ser	320	325	330
Val	Gln	Val	Ser	Gln	Lys	Val	Phe	Gln	Gly	Cys	Gly	Pro	Pro	Lys	335	340	345
Pro	Leu	Pro	Ala	Gly	Arg	Ile	Ser	Arg	Ser	Ile	Ser	Glu	Ser	Ala	350	355	360
Phe	Ser	Ala	Arg	Phe	Arg	Pro	His	His	Pro	Glu	Glu	Arg	Pro	Thr	365	370	375
Thr	Ala	Ala	Gly	Thr	Ser	Leu	Asp	Arg	Leu	Val	Thr	Asp	Val	Lys	380	385	390
Glu	Lys	Leu	Lys	Gln	Ala	Lys	Lys	Phe	Trp	Ser	Ser	Leu	Pro	Ser	395	400	405
Asn	Val	Cys	Asn	Asp	Glu	Arg	Met	Ala	Ala	Gly	Asn	Gly	Asn	Glu	410	415	420
Asp	Asp	Cys	Trp	Asn	Gly	Lys	Gly	Lys	Ser	Arg	Tyr	Leu	Phe	Ala	425	430	435

Val	Thr	Gly	Asn	Gly	Leu	Ala	Asn	Gln	Gly	Asn	Asn	Pro	Glu	Val
				440					445					450
Gln	Val	Asp	Thr	Ser	Lys	Pro	Asp	Ile	Leu	Ile	Leu	Arg	Gln	Ile
				455					460					465
Met	Ala	Leu	Arg	Val	Met	Thr	Ser	Lys	Met	Lys	Asn	Ala	Tyr	Asn
				470					475					480
Gly	Asn	Asp	Val	Asp	Phe	Phe	Asp	Ile	Ser	Asp	Glu	Ser	Ser	Gly
				485					490					495
Glu	Gly	Ser	Gly	Ser	Gly	Cys	Glu	Tyr	Gln	Gln	Cys	Pro	Ser	Glu
				500					505					510
Phe	Asp	Tyr	Asn	Ala	Thr	Asp	His	Ala	Gly	Lys	Ser	Ala	Asn	Glu
				515					520					525
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu
				530					535					540
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp
				545					550					555

Arg

<210> 25
 <211> 870
 <212> DNA
 <213> Homo Sapien

<400> 25
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 gctgagtatc ctgacctgag tcatccccag ggatcaggag cctccagcag 100
 ggaaccttcc attatattct tcaagcaact tacagctgca ccgacagttg 150
 cgatgaaagt tctaattctt tccctoctcc tgttgctgcc actaatgctg 200
 atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250
 ggaccgaggc caggcttcta ggagatggct ccaggaaggc ggccaagaat 300
 gtgagtgcaa agattggttc ctgagagccc cgagaagaaa attcatgaca 350
 gtgtctgggc tgccaaagaa gcagtgcgcc tgtgatcatt tcaagggcaa 400
 tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450
 ccagagcctg ccagcaattt ctcaaacaat gtcagctaag aagctttgct 500
 ctgcctttgt aggagctctg agcgcccact cttccaatta aacattctca 550
 gccaagaaga cagtgagcac acctaccaga cactcttctt ctcccacctc 600
 actctcccac tgtaccaccc cctaaatcat tccagtgtc tcaaaaagca 650
 tgtttttcaa gatcattttg tttgttgctc tctctagtgt cttcttctct 700
 cgtcagtctt agcctgtgcc ctccccttac ccaggcttag gcttaattac 750

ctgaaagatt ccaggaaact gtagcttcct agctagtgtc atttaacctt 800
 aaatgcaatc aggaaagtag caaacagaag tcaataaata tttttaaatg 850
 tcaaaaaaaaa aaaaaaaaaa 870

<210> 26
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 26
 Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Leu Pro Leu Met
 1 5 10 15
 Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg
 20 25 30
 Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu
 35 40 45
 Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro
 50 55 60
 Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys
 65 70 75
 Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln
 80 85 90
 Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln
 95 100 105
 Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu
 110 115

<210> 27
 <211> 1371
 <212> DNA
 <213> Homo Sapien

<400> 27
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 ggaagcacag ctcagagctg gtctgccatg gacatcctgg tcccactcct 100
 gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
 tgggctgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200
 gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250
 cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300
 tggagctggg ctgcggaacc ggagccaact ttcagttcta cccaccgggc 350
 tgcaggggtca cctgcctaga cccaaatccc cactttgaga agttcctgac 400
 aaagagcatg gctgagaaca ggcacctcca atatgagcgg tttgtggtgg 450
 ctctgggaga ggacatgaga cagctggctg atggctccat ggatgtggtg 500
 gtctgcactc tggtgctgtg ctctgtgcag agcccaagga aggtcctgca 550

ggaggtccgg agagtactga gaccgggagg tgtgctcttt ttctgggagc 600
 atgtggcaga accatatgga agctgggcct tcatgtggca gcaagttttc 650
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 ctggaaggat cttgagaacg cccagttctc cgaaatccaa atggaacgac 750
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 gacagtgaaa aagctctact tctacgctga cccagggagg aaacactagg 1050
 accctgttgt atcctcaact gcaagtttct ggactagtct cccaacgttt 1100
 gcctcccaat gttgtccctt tcttcgttc ccatggtaaa gctcctctcg 1150
 ctttctctct gaggetacac ccatgctgtc ctaggaactg gtcacaaaag 1200
 tcatggtgcc tgcattccctg ccaagcccc ctgaccctct ctccccacta 1250
 ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300
 atgccagagc aagactcaaa gaggcagagg ttttgttctc aaatattttt 1350
 taataaatag acgaaaccac g 1371

<210> 28
 <211> 277
 <212> PRT
 <213> Homo Sapien

<400> 28
 Met Asp Ile Leu Val Pro Leu Leu Gln Leu Leu Val Leu Leu Leu
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 Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys Trp Gln Pro
 20 25 30
 Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro
 35 40 45
 Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser
 50 55 60
 Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
 65 70 75
 Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro
 80 85 90
 Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys
 95 100 105
 Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu
 110 115 120

Arg	Phe	Val	Val	Ala	Pro	Gly	Glu	Asp	Met	Arg	Gln	Leu	Ala	Asp	
				125					130					135	
Gly	Ser	Met	Asp	Val	Val	Val	Cys	Thr	Leu	Val	Leu	Cys	Ser	Val	
				140					145					150	
Gln	Ser	Pro	Arg	Lys	Val	Leu	Gln	Glu	Val	Arg	Arg	Val	Leu	Arg	
				155					160					165	
Pro	Gly	Gly	Val	Leu	Phe	Phe	Trp	Glu	His	Val	Ala	Glu	Pro	Tyr	
				170					175					180	
Gly	Ser	Trp	Ala	Phe	Met	Trp	Gln	Gln	Val	Phe	Glu	Pro	Thr	Trp	
				185					190					195	
Lys	His	Ile	Gly	Asp	Gly	Cys	Cys	Leu	Thr	Arg	Glu	Thr	Trp	Lys	
				200					205					210	
Asp	Leu	Glu	Asn	Ala	Gln	Phe	Ser	Glu	Ile	Gln	Met	Glu	Arg	Gln	
				215					220					225	
Pro	Pro	Pro	Leu	Lys	Trp	Leu	Pro	Val	Gly	Pro	His	Ile	Met	Gly	
				230					235					240	
Lys	Ala	Val	Lys	Gln	Ser	Phe	Pro	Ser	Ser	Lys	Ala	Leu	Ile	Cys	
				245					250					255	
Ser	Phe	Pro	Ser	Leu	Gln	Leu	Glu	Gln	Ala	Thr	His	Gln	Pro	Ile	
				260					265					270	
Tyr	Leu	Pro	Leu	Arg	Gly	Thr									
				275											

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

<400> 29
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 aacgctgctg ctgctgctgc tgctgcttaa aggctcatgc ttggagtggg 100
 gactggtcgg tgcccagaaa gtctcttctg ccaactgacgc ccccatcagg 150
 gattgggcct tctttccccc ttcctttctg tgtctcctgc ctcatcggcc 200
 tgccatgacc tgcagccaag cccagccccc tggggaaggg gagaaagtgg 250
 gggatggcta agaaagctgg gagataggga acagaagagg gtagtgggtg 300
 ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350
 atttatacaa agatattaag gccctgttca ttaagaaatt gtcccttcc 400
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 taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 30
Met Leu Leu Leu Thr Leu Leu Leu Leu Leu Leu Leu Lys Gly
1 5 10 15
Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser
20 25 30
Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser
35 40 45
Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
50 55 60
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
65 70

<210> 31
<211> 1660
<212> DNA
<213> Homo Sapien

<400> 31
gtttgaattc cttcaactat acccacagtc caaaagcaga ctactgtgt 50
cccaggctac cagttcctcc aagcaagtca tttcccttat ttaaccgatg 100
tgtccctcaa acacctgagt gctactccct atttgcattt gttttgataa 150
atgatgttga caccctccac cgaattctaa gtggaatcat gtcggaaga 200
gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttggccat 250
gatgtttacc ttcagattca taccaccct tctggttcac attttcattt 300
cattggttat tttgggattg ttgtttgtct gcggtgtttt atggtggctg 350
tattatgact ataccaacga cctcagcata gaattggaca cagaaaggga 400
aaatatgaag tgcgtgctgg ggtttgctat cgtatccaca ggcattcacg 450
cagtgtgct cgtcttgatt tttgttctca gaaagagaat aaaattgaca 500
gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttcct 550
gctgttccag ccactgtgga catttgccat cctcattttt ttctgggtcc 600
tctgggtggc tgtgctgctg agcctgggaa ctgcaggagc tgcccagggt 650
atggaaggcg gccaaagtga atataagccc ctttcgggca ttcggtacat 700
gtggtcgtac catttaattg gcctcatctg gactagtga ttcattcctg 750
cgtgccagca aatgactata gctggggcag tggttacttg ttatttcaac 800
agaagtaaaa atgactctcc tgatcatccc atcctttcgt ctctctccat 850
tctcttcttc taccatcaag gaaccgttgt gaaagggta tttttaattt 900
ctgtggtgag gattccgaga atcattgtca tgtacatgca aaacgcactg 950
aaagaacagc agcatggtgc attgtccagg tacctgttcc gatgctgcta 1000
ctgctgtttt tgggtgtctg acaaatacct gctccatctc aaccagaatg 1050

catatactac aactgctatt aatgggacag atttctgtac atcagcaaaa 1100
gatgcattca aaatcttgtc caagaactca agtcacttta catctattaa 1150
ctgctttgga gacttcataa tttttctagg aaaggtgtta gtggtgtgtt 1200
tcactgtttt tggaggactc atggctttta actacaatcg ggcattccag 1250
gtgtgggcag tccctctgtt attggtagct tttttgcct acttagtagc 1300
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gttttgctgt tgatctggaa acaaatgatg gatcgtcaga aaagccctac 1400
tttatggatc aagaatttct gagtttcgta aaaaggagca acaaattaaa 1450
caatgcaagg gcacagcagg acaagcactc attaaggaat gaggagggaa 1500
cagaactcca ggccattgtg agatagatac ccatttaggt atctgtacct 1550
ggaaaacatt tccttctaag agccatttac agaatagaag atgagaccac 1600
tagagaaaag ttagtgaatt tttttttaa agacctaata aaccctattc 1650
ttcctcaaaa 1660

<210> 32
<211> 445
<212> PRT
<213> Homo Sapien

<400> 32
Met Ser Gly Arg Asp Thr Ile Leu Gly Leu Cys Ile Leu Ala Leu
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Ala Leu Ser Leu Ala Met Met Phe Thr Phe Arg Phe Ile Thr Thr
20 25 30
Leu Leu Val His Ile Phe Ile Ser Leu Val Ile Leu Gly Leu Leu
35 40 45
Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
50 55 60
Asp Leu Ser Ile Glu Leu Asp Thr Glu Arg Glu Asn Met Lys Cys
65 70 75
Val Leu Gly Phe Ala Ile Val Ser Thr Gly Ile Thr Ala Val Leu
80 85 90
Leu Val Leu Ile Phe Val Leu Arg Lys Arg Ile Lys Leu Thr Val
95 100 105
Glu Leu Phe Gln Ile Thr Asn Lys Ala Ile Ser Ser Ala Pro Phe
110 115 120
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His	Ser	Gly	Val	Leu	Asp	Asn	Ser	Gly	Gly	Lys	Ile	Leu	Val	Arg
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Glu Lys Gln Tyr	Val Val Glu Pro Asn	Phe Ala Asn Lys Ala	Val		
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Cys Arg Thr Asn	Gly Phe Tyr Ser Leu	His Val Gln Ser Trp	Phe		
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Pro Asp Ile Leu	Asn Ala Ile Lys Arg	Val Gly Tyr Trp Ser	Gly		
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Gly Thr Ser Thr	Gly Ala Ala Ile Asn	Phe Ala Leu Glu Gln	Leu		
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Ala Ala Gln Glu	Glu Leu Glu Val Ile	Ala Thr His Pro Ala	Arg		
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Asp His Ser Phe	Phe Val Asp Glu Phe	Asp Asn Leu His Gln	Tyr		
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<211> 2095

<212> DNA

<213> Homo Sapien

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Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
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Gln	Leu	Arg	Arg	Val	Ile	Ala	Ala	His	Gly	Phe	Ser	Ser	Lys	Glu
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 tgaagcagtg tgggcctgaa gtgtgatttg gcctgtgaac ttggctgtgc 2300
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<210> 38
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 38
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 Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys
 35 40 45
 Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu
 50 55 60
 Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu
 65 70 75
 Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn
 80 85 90
 Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp
 95 100 105

Phe	Tyr	Val	Lys	Gly	Phe	Tyr	Cys	Ala	Glu	Cys	Arg	Ala	Gly	Trp
				110					115					120
Tyr	Gly	Gly	Asp	Cys	Met	Arg	Cys	Gly	Gln	Val	Leu	Arg	Ala	Pro
				125					130					135
Lys	Gly	Gln	Ile	Leu	Leu	Glu	Ser	Tyr	Pro	Leu	Asn	Ala	His	Cys
				140					145					150
Glu	Trp	Thr	Ile	His	Ala	Lys	Pro	Gly	Phe	Val	Ile	Gln	Leu	Arg
				155					160					165
Phe	Val	Met	Leu	Ser	Leu	Glu	Phe	Asp	Tyr	Met	Cys	Gln	Tyr	Asp
				170					175					180
Tyr	Val	Glu	Val	Arg	Asp	Gly	Asp	Asn	Arg	Asp	Gly	Gln	Ile	Ile
				185					190					195
Lys	Arg	Val	Cys	Gly	Asn	Glu	Arg	Pro	Ala	Pro	Ile	Gln	Ser	Ile
				200					205					210
Gly	Ser	Ser	Leu	His	Val	Leu	Phe	His	Ser	Asp	Gly	Ser	Lys	Asn
				215					220					225
Phe	Asp	Gly	Phe	His	Ala	Ile	Tyr	Glu	Glu	Ile	Thr	Ala	Cys	Ser
				230					235					240
Ser	Ser	Pro	Cys	Phe	His	Asp	Gly	Thr	Cys	Val	Leu	Asp	Lys	Ala
				245					250					255
Gly	Ser	Tyr	Lys	Cys	Ala	Cys	Leu	Ala	Gly	Tyr	Thr	Gly	Gln	Arg
				260					265					270
Cys	Glu	Asn	Leu	Leu	Glu	Glu	Arg	Asn	Cys	Ser	Asp	Pro	Gly	Gly
				275					280					285
Pro	Val	Asn	Gly	Tyr	Gln	Lys	Ile	Thr	Gly	Gly	Pro	Gly	Leu	Ile
				290					295					300
Asn	Gly	Arg	His	Ala	Lys	Ile	Gly	Thr	Val	Val	Ser	Phe	Phe	Cys
				305					310					315
Asn	Asn	Ser	Tyr	Val	Leu	Ser	Gly	Asn	Glu	Lys	Arg	Thr	Cys	Gln
				320					325					330
Gln	Asn	Gly	Glu	Trp	Ser	Gly	Lys	Gln	Pro	Ile	Cys	Ile	Lys	Ala
				335					340					345
Cys	Arg	Glu	Pro	Lys	Ile	Ser	Asp	Leu	Val	Arg	Arg	Arg	Val	Leu
				350					355					360
Pro	Met	Gln	Val	Gln	Ser	Arg	Glu	Thr	Pro	Leu	His	Gln	Leu	Tyr
				365					370					375
Ser	Ala	Ala	Phe	Ser	Lys	Gln	Lys	Leu	Gln	Ser	Ala	Pro	Thr	Lys
				380					385					390
Lys	Pro	Ala	Leu	Pro	Phe	Gly	Asp	Leu	Pro	Met	Gly	Tyr	Gln	His
				395					400					405
Leu	His	Thr	Gln	Leu	Gln	Tyr	Glu	Cys	Ile	Ser	Pro	Phe	Tyr	Arg
				410					415					420

Arg	Leu	Gly	Ser	Ser	Arg	Arg	Thr	Cys	Leu	Arg	Thr	Gly	Lys	Trp	425	430	435
Ser	Gly	Arg	Ala	Pro	Ser	Cys	Ile	Pro	Ile	Cys	Gly	Lys	Ile	Glu	440	445	450
Asn	Ile	Thr	Ala	Pro	Lys	Thr	Gln	Gly	Leu	Arg	Trp	Pro	Trp	Gln	455	460	465
Ala	Ala	Ile	Tyr	Arg	Arg	Thr	Ser	Gly	Val	His	Asp	Gly	Ser	Leu	470	475	480
His	Lys	Gly	Ala	Trp	Phe	Leu	Val	Cys	Ser	Gly	Ala	Leu	Val	Asn	485	490	495
Glu	Arg	Thr	Val	Val	Val	Ala	Ala	His	Cys	Val	Thr	Asp	Leu	Gly	500	505	510
Lys	Val	Thr	Met	Ile	Lys	Thr	Ala	Asp	Leu	Lys	Val	Val	Leu	Gly	515	520	525
Lys	Phe	Tyr	Arg	Asp	Asp	Asp	Arg	Asp	Glu	Lys	Thr	Ile	Gln	Ser	530	535	540
Leu	Gln	Ile	Ser	Ala	Ile	Ile	Leu	His	Pro	Asn	Tyr	Asp	Pro	Ile	545	550	555
Leu	Leu	Asp	Ala	Asp	Ile	Ala	Ile	Leu	Lys	Leu	Leu	Asp	Lys	Ala	560	565	570
Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg	575	580	585
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly	590	595	600
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp	605	610	615
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys	620	625	630
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp	635	640	645
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile	650	655	660
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	665	670	675
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser	680	685	690
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe	695	700	705
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys	710	715	720

<210> 39
 <211> 2571
 <212> DNA

<213> Homo Sapien

<400> 39

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ggctggtttg ggccttgta gctgacagaa ggtggccagg gagaatgcag 200
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cagaactctg taaaggtgcc tcccactacg gcctgaccaa agataggaag 350
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ctagtttttt ttcagtgtgg aggatttctc attactctac aacattgttt 2350
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ctgaagtctg ccaagggtag attatggcca tttttaattt acagctaaaa 2500
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<210> 40
<211> 632
<212> PRT
<213> Homo Sapien

<400> 40
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Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
35 40 45
Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
50 55 60
Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser

65										70					75				
Leu	Met	Thr	Asp	Glu	Pro	Gly	Leu	Asp	Asn	Pro	Ala	Tyr	Val	Ser					
				80					85					90					
Ser	Ala	Glu	Asp	Gly	Gln	Pro	Ala	Ile	Ser	Pro	Val	Asp	Ser	Gly					
				95					100					105					
Arg	Ser	Asn	Arg	Thr	Arg	Ala	Arg	Pro	Phe	Glu	Arg	Ser	Thr	Ile					
				110					115					120					
Arg	Ser	Arg	Ser	Phe	Lys	Lys	Ile	Asn	Arg	Ala	Leu	Ser	Val	Leu					
				125					130					135					
Arg	Arg	Thr	Lys	Ser	Gly	Ser	Ala	Val	Ala	Asn	His	Ala	Asp	Gln					
				140					145					150					
Gly	Arg	Glu	Asn	Ser	Glu	Asn	Thr	Thr	Ala	Pro	Glu	Val	Phe	Pro					
				155					160					165					
Arg	Leu	Tyr	His	Leu	Ile	Pro	Asp	Gly	Glu	Ile	Thr	Ser	Ile	Lys					
				170					175					180					
Ile	Asn	Arg	Val	Asp	Pro	Ser	Glu	Ser	Leu	Ser	Ile	Arg	Leu	Val					
				185					190					195					
Gly	Gly	Ser	Glu	Thr	Pro	Leu	Val	His	Ile	Ile	Ile	Gln	His	Ile					
				200					205					210					
Tyr	Arg	Asp	Gly	Val	Ile	Ala	Arg	Asp	Gly	Arg	Leu	Leu	Pro	Gly					
				215					220					225					
Asp	Ile	Ile	Leu	Lys	Val	Asn	Gly	Met	Asp	Ile	Ser	Asn	Val	Pro					
				230					235					240					
His	Asn	Tyr	Ala	Val	Arg	Leu	Leu	Arg	Gln	Pro	Cys	Gln	Val	Leu					
				245					250					255					
Trp	Leu	Thr	Val	Met	Arg	Glu	Gln	Lys	Phe	Arg	Ser	Arg	Asn	Asn					
				260					265					270					
Gly	Gln	Ala	Pro	Asp	Ala	Tyr	Arg	Pro	Arg	Asp	Asp	Ser	Phe	His					
				275					280					285					
Val	Ile	Leu	Asn	Lys	Ser	Ser	Pro	Glu	Glu	Gln	Leu	Gly	Ile	Lys					
				290					295					300					
Leu	Val	Arg	Lys	Val	Asp	Glu	Pro	Gly	Val	Phe	Ile	Phe	Asn	Val					
				305					310					315					
Leu	Asp	Gly	Gly	Val	Ala	Tyr	Arg	His	Gly	Gln	Leu	Glu	Glu	Asn					
				320					325					330					
Asp	Arg	Val	Leu	Ala	Ile	Asn	Gly	His	Asp	Leu	Arg	Tyr	Gly	Ser					
				335					340					345					
Pro	Glu	Ser	Ala	Ala	His	Leu	Ile	Gln	Ala	Ser	Glu	Arg	Arg	Val					
				350					355					360					
His	Leu	Val	Val	Ser	Arg	Gln	Val	Arg	Gln	Arg	Ser	Pro	Asp	Ile					
				365					370					375					
Phe	Gln	Glu	Ala	Gly	Trp	Asn	Ser	Asn	Gly	Ser	Trp	Ser	Pro	Gly					

380					385					390				
Pro	Gly	Glu	Arg	Ser	Asn	Thr	Pro	Lys	Pro	Leu	His	Pro	Thr	Ile
				395					400					405
Thr	Cys	His	Glu	Lys	Val	Val	Asn	Ile	Gln	Lys	Asp	Pro	Gly	Glu
				410					415					420
Ser	Leu	Gly	Met	Thr	Val	Ala	Gly	Gly	Ala	Ser	His	Arg	Glu	Trp
				425					430					435
Asp	Leu	Pro	Ile	Tyr	Val	Ile	Ser	Val	Glu	Pro	Gly	Gly	Val	Ile
				440					445					450
Ser	Arg	Asp	Gly	Arg	Ile	Lys	Thr	Gly	Asp	Ile	Leu	Leu	Asn	Val
				455					460					465
Asp	Gly	Val	Glu	Leu	Thr	Glu	Val	Ser	Arg	Ser	Glu	Ala	Val	Ala
				470					475					480
Leu	Leu	Lys	Arg	Thr	Ser	Ser	Ser	Ile	Val	Leu	Lys	Ala	Leu	Glu
				485					490					495
Val	Lys	Glu	Tyr	Glu	Pro	Gln	Glu	Asp	Cys	Ser	Ser	Pro	Ala	Ala
				500					505					510
Leu	Asp	Ser	Asn	His	Asn	Met	Ala	Pro	Pro	Ser	Asp	Trp	Ser	Pro
				515					520					525
Ser	Trp	Val	Met	Trp	Leu	Glu	Leu	Pro	Arg	Cys	Leu	Tyr	Asn	Cys
				530					535					540
Lys	Asp	Ile	Val	Leu	Arg	Arg	Asn	Thr	Ala	Gly	Ser	Leu	Gly	Phe
				545					550					555
Cys	Ile	Val	Gly	Gly	Tyr	Glu	Glu	Tyr	Asn	Gly	Asn	Lys	Pro	Phe
				560					565					570
Phe	Ile	Lys	Ser	Ile	Val	Glu	Gly	Thr	Pro	Ala	Tyr	Asn	Asp	Gly
				575					580					585
Arg	Ile	Arg	Cys	Gly	Asp	Ile	Leu	Leu	Ala	Val	Asn	Gly	Arg	Ser
				590					595					600
Thr	Ser	Gly	Met	Ile	His	Ala	Cys	Leu	Ala	Arg	Leu	Leu	Lys	Glu
				605					610					615
Leu	Lys	Gly	Arg	Ile	Thr	Leu	Thr	Ile	Val	Ser	Trp	Pro	Gly	Thr
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Phe Leu

<210> 41
 <211> 1964
 <212> DNA
 <213> Homo Sapien

<400> 41
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 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250
 aaggagttca tggctaattt ccataagacc ctcatttttg ggaaggga 300
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 ccggtatcgc cctcaggaat gtaaagcttt acagagggtc gccatcctcg 500
 tccccaccg gaacagagag aaacacctga tgtacctgtt ggaacatctg 550
 catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
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 tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
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 gtgaaaaagc aaaa 1964

<210> 42
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 42
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 Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
 35 40 45
 Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
 50 55 60
 Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
 65 70 75
 Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
 80 85 90
 Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
 95 100 105
 Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
 110 115 120
 Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
 125 130 135
 His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
 140 145 150
 Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
 155 160 165
 Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu
 170 175 180
 Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val
 185 190 195
 Asp Leu Val Pro Glu Asn Asp Phe Asn Leu Tyr Lys Cys Glu Glu
 200 205 210
 His Pro Lys His Leu Val Val Gly Arg Asn Ser Thr Gly Tyr Arg
 215 220 225

Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg	230	235	240
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly	245	250	255
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln	260	265	270
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr	275	280	285
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu	290	295	300
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp	305	310	315
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn	320	325	330
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala		335	340	

<210> 43
 <211> 485
 <212> DNA
 <213> Homo Sapien

<400> 43
 gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50
 gctcccagat ctgggccgct tgccctctgc tcctcctcct cctcgccagc 100
 ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
 gcaacccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200
 agaggcgaag gaggcgagac acccaattcc ccatctgcat tttctgctgc 250
 ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300
 acctgcccctg cccccgtccc ctcccttctt tattttattcc tgctgccccca 350
 gaacataggt cttggaataa aatggctggt tcttttgttt tccaaaaaaaa 400
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44
 <211> 84
 <212> PRT
 <213> Homo Sapien

<400> 44
 Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu
 1 5 10 15
 Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
 20 25 30
 Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala

	35		40		45									
Arg	Ala	Ser	Trp	Met	Pro	Met	Phe	Gln	Arg	Arg	Arg	Arg	Arg	Asp
	50								55					60
Thr	His	Phe	Pro	Ile	Cys	Ile	Phe	Cys	Cys	Gly	Cys	Cys	His	Arg
	65								70					75
Ser	Lys	Cys	Gly	Met	Cys	Cys	Lys	Thr						
	80													

<210> 45
 <211> 1076
 <212> DNA
 <213> Homo Sapien

<400> 45
 gtggcttcat ttcagtggct gacttccaga gagcaatatg gctgggtccc 50
 caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100
 gcctctggac ccgtgaaaga gctggtcggt tccgttgggtg gggccgtgac 150
 tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200
 tcaacacaac ccctcttgtc accatacagc cagaaggggg cactatcata 250
 gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300
 ctccctgaag ctgagcaaac tgaagaagaa tgactcaggg atctactatg 350
 tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400
 ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450
 gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500
 atggggaaga ggatgtgatt tatacctgga aggccctggg gcaagcagcc 550
 aatgagtcct ataattgggtc catcctcccc atctcctgga gatggggaga 600
 aagtgatatg accttcattc gcgttgccag gaaccctgtc agcagaaact 650
 totcaagccc catccttgcc aggaagctct gtgaagggtc tgctgatgac 700
 ccagattcct ccatggtcct cctgtgtctc ctgttgggtc ccctcctgct 750
 cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
 aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
 cctaacatat gccccattc tggagagAAC acagagtacg acacaatccc 900
 tcacactaat agaacaatcc taaaggaaga tccagcaaact acggtttact 950
 ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
 atgccagaca caccaaggct atttgcctat gagaatgtta tctagacagc 1050
 agtgcactcc cctaagtctc tgctca 1076

<210> 46
 <211> 335

<212> PRT
 <213> Homo Sapien

<400> 46

Met	Ala	Gly	Ser	Pro	Thr	Cys	Leu	Thr	Leu	Ile	Tyr	Ile	Leu	Trp	1	5	10	15
Gln	Leu	Thr	Gly	Ser	Ala	Ala	Ser	Gly	Pro	Val	Lys	Glu	Leu	Val	20	25	30	
Gly	Ser	Val	Gly	Gly	Ala	Val	Thr	Phe	Pro	Leu	Lys	Ser	Lys	Val	35	40	45	
Lys	Gln	Val	Asp	Ser	Ile	Val	Trp	Thr	Phe	Asn	Thr	Thr	Pro	Leu	50	55	60	
Val	Thr	Ile	Gln	Pro	Glu	Gly	Gly	Thr	Ile	Ile	Val	Thr	Gln	Asn	65	70	75	
Arg	Asn	Arg	Glu	Arg	Val	Asp	Phe	Pro	Asp	Gly	Gly	Tyr	Ser	Leu	80	85	90	
Lys	Leu	Ser	Lys	Leu	Lys	Lys	Asn	Asp	Ser	Gly	Ile	Tyr	Tyr	Val	95	100	105	
Gly	Ile	Tyr	Ser	Ser	Ser	Leu	Gln	Gln	Pro	Ser	Thr	Gln	Glu	Tyr	110	115	120	
Val	Leu	His	Val	Tyr	Glu	His	Leu	Ser	Lys	Pro	Lys	Val	Thr	Met	125	130	135	
Gly	Leu	Gln	Ser	Asn	Lys	Asn	Gly	Thr	Cys	Val	Thr	Asn	Leu	Thr	140	145	150	
Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys	155	160	165	
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu	170	175	180	
Pro	Ile	Ser	Trp	Arg	Trp	Gly	Glu	Ser	Asp	Met	Thr	Phe	Ile	Cys	185	190	195	
Val	Ala	Arg	Asn	Pro	Val	Ser	Arg	Asn	Phe	Ser	Ser	Pro	Ile	Leu	200	205	210	
Ala	Arg	Lys	Leu	Cys	Glu	Gly	Ala	Ala	Asp	Asp	Pro	Asp	Ser	Ser	215	220	225	
Met	Val	Leu	Leu	Cys	Leu	Leu	Leu	Val	Pro	Leu	Leu	Leu	Ser	Leu	230	235	240	
Phe	Val	Leu	Gly	Leu	Phe	Leu	Trp	Phe	Leu	Lys	Arg	Glu	Arg	Gln	245	250	255	
Glu	Glu	Tyr	Ile	Glu	Glu	Lys	Lys	Arg	Val	Asp	Ile	Cys	Arg	Glu	260	265	270	
Thr	Pro	Asn	Ile	Cys	Pro	His	Ser	Gly	Glu	Asn	Thr	Glu	Tyr	Asp	275	280	285	
Thr	Ile	Pro	His	Thr	Asn	Arg	Thr	Ile	Leu	Lys	Glu	Asp	Pro	Ala	290	295	300	

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn
 305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala
 320 325 330

Tyr Glu Asn Val Ile
 335

<210> 47
 <211> 766
 <212> DNA
 <213> Homo Sapien

<400> 47
 ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50
 gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100
 ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150
 tctcaaaacc ccatctcttg ctttgagtgg tggttccag gaattatagg 200
 agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
 aaagagcgtg ctgcaacaac agaactggaa tgtttctttc atcatttttc 300
 agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350
 ggctctctta aaaggctctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactgggtt 500
 caataaaccc accagtaacg acaccatggc gagggtgctg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcacgggtt tccttggtg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 48
 <211> 229
 <212> PRT
 <213> Homo Sapien

<400> 48
 Met Thr Cys Cys Glu Gly Trp Thr Ser Cys Asn Gly Phe Ser Leu
 1 5 10 15
 Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu
 20 25 30
 Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
 35 40 45
 Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu

	50		55		60
Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg	65		70		75
Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe	80		85		90
Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser	95		100		105
Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser	110		115		120
Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp	125		130		135
Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser	140		145		150
Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr	155		160		165
Met Ala Ser Gly Trp Arg Ala Ser Ser Phe His Phe Asp Ser Glu	170		175		180
Glu Asn Lys His Arg Leu Ile His Phe Ser Val Phe Leu Gly Leu	185		190		195
Leu Leu Val Gly Ile Leu Glu Val Leu Phe Gly Leu Ser Gln Ile	200		205		210
Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg	215		220		225
Ser Gln Ile Val					

<210> 49
 <211> 636
 <212> DNA
 <213> Homo Sapien

<400> 49
 atccgttctc tgcgctgccca gctcaggtga gccctcgcca aggtgacctc 50
 gcaggacact ggtgaaggag cagtgaggaa cctgcagagt cacacagttg 100
 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagt cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
 agagagtgc cctggccctt ctctacttg caggcctgac tgccttgga 250
 gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggatcgcggc agttctgagt ggcaaagtca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaaggccatc ccactcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500

taacactggc ccccagcacc tcctcccctg ggaggcctta tcctcaagga 550
 aggacttctc tccaagggca ggctgttagg cccctttctg atcaggaggc 600
 ttctttatga attaaactcg ccccaccacc ccctca 636

<210> 50
 <211> 89
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
 1 5 10 15
 Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe
 20 25 30
 Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly
 35 40 45
 Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys
 50 55 60
 Cys Lys Tyr Lys Ser Ser Gln Lys Gln His Ser Pro Val Pro Glu
 65 70 75
 Lys Ala Ile Pro Leu Ile Thr Pro Gly Ser Ala Thr Thr Cys
 80 85

<210> 51
 <211> 1734
 <212> DNA
 <213> Homo Sapien

<400> 51
 gtggactctg agaagcccag gcagttgagg acaggagaga gaaggctgca 50
 gacccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
 gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
 agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
 cctggcctgc ctctgctgg ccctctgcct gggcagtggg gaggctggcc 250
 ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
 caaagaggcc ggaggggcag ctggctctaa agtcagttag gcccttggcc 400
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
 ggcgagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
 gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
 acggagcaga tgctgtccgc ggctcctggc aggggggtgcc tggccacagt 600
 ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaaggtgg 650
 ccttggaggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700

tccacggata ccccggaac tcagcaggca gctttggaat gaatcctcag 750
 ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
 caacactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
 gcaaccagaa tgaaggggtgc acgaatcccc caccatctgg ctcaggtgga 900
 ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtg 950
 cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
 gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
 agtgggtggca gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
 tgagtcctcc tggggatcca gcaccggctc ctctccggc aaccacggtg 1150
 ggagcggcgg aggaaatgga cataaacccg ggtgtgaaaa gccaggggaat 1200
 gaagcccgcg ggagcgggga atctgggatt cagggttca gaggacaggg 1250
 agtttccagc aacatgaggg aaataagcaa agagggcaat cgcctccttg 1300
 gaggtcttg agacaattat cgggggcaag ggtcagctg gggcagtgga 1350
 ggaggtgacg ctggttggtg agtcaatact gtgaactctg agacgtctcc 1400
 tgggatgttt aactttgaca ctttctggaa gaattttaaa tccaagctgg 1450
 gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
 cctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600
 aaataaacct tagctgcccc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 52
 Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
 1 5 10 15
 Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75

Arg	Glu	Ala	Val	Gly	Thr	Gly	Val	Arg	Gln	Val	Pro	Gly	Phe	Gly		80	85	90
Ala	Ala	Asp	Ala	Leu	Gly	Asn	Arg	Val	Gly	Glu	Ala	Ala	His	Ala		95	100	105
Leu	Gly	Asn	Thr	Gly	His	Glu	Ile	Gly	Arg	Gln	Ala	Glu	Asp	Val		110	115	120
Ile	Arg	His	Gly	Ala	Asp	Ala	Val	Arg	Gly	Ser	Trp	Gln	Gly	Val		125	130	135
Pro	Gly	His	Ser	Gly	Ala	Trp	Glu	Thr	Ser	Gly	Gly	His	Gly	Ile		140	145	150
Phe	Gly	Ser	Gln	Gly	Gly	Leu	Gly	Gly	Gln	Gly	Gln	Gly	Asn	Pro		155	160	165
Gly	Gly	Leu	Gly	Thr	Pro	Trp	Val	His	Gly	Tyr	Pro	Gly	Asn	Ser		170	175	180
Ala	Gly	Ser	Phe	Gly	Met	Asn	Pro	Gln	Gly	Ala	Pro	Trp	Gly	Gln		185	190	195
Gly	Gly	Asn	Gly	Gly	Pro	Pro	Asn	Phe	Gly	Thr	Asn	Thr	Gln	Gly		200	205	210
Ala	Val	Ala	Gln	Pro	Gly	Tyr	Gly	Ser	Val	Arg	Ala	Ser	Asn	Gln		215	220	225
Asn	Glu	Gly	Cys	Thr	Asn	Pro	Pro	Pro	Ser	Gly	Ser	Gly	Gly	Gly		230	235	240
Ser	Ser	Asn	Ser	Gly	Gly	Gly	Ser	Gly	Ser	Gln	Ser	Gly	Ser	Ser		245	250	255
Gly	Ser	Gly	Ser	Asn	Gly	Asp	Asn	Asn	Asn	Gly	Ser	Ser	Ser	Gly		260	265	270
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Gly	Ser		275	280	285
Ser	Gly	Gly	Ser	Ser	Gly	Gly	Ser	Ser	Gly	Asn	Ser	Gly	Gly	Ser		290	295	300
Arg	Gly	Asp	Ser	Gly	Ser	Glu	Ser	Ser	Trp	Gly	Ser	Ser	Thr	Gly		305	310	315
Ser	Ser	Ser	Gly	Asn	His	Gly	Gly	Ser	Gly	Gly	Gly	Asn	Gly	His		320	325	330
Lys	Pro	Gly	Cys	Glu	Lys	Pro	Gly	Asn	Glu	Ala	Arg	Gly	Ser	Gly		335	340	345
Glu	Ser	Gly	Ile	Gln	Gly	Phe	Arg	Gly	Gln	Gly	Val	Ser	Ser	Asn		350	355	360
Met	Arg	Glu	Ile	Ser	Lys	Glu	Gly	Asn	Arg	Leu	Leu	Gly	Gly	Ser		365	370	375
Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly		380	385	390

Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser
				395					400					405
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser
				410					415					420
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg
				425					430					435
Ser	Ser	Arg	Ile	Pro										
				440										

<210> 53
 <211> 1676
 <212> DNA
 <213> Homo Sapien

<400> 53
 ggagaagagg ttgtgtggga caagctgctc ccgacagaag gatgtcgctg 50
 ctgagcctgc cctggctggg cctcagaccg gtggcaatgt ccccatggct 100
 actcctgctg ctggttgtgg gctcctggct actcgccgc atcctggctt 150
 ggacctatgc cttctataac aactgccgcc ggctccagtg tttccacag 200
 cccccaaac ggaactggtt ttggggtcac ctgggcctga tcaactcctac 250
 agaggagggc ttgaaggact cgaccagat gtcggccacc tattccagg 300
 gctttacggt atggctgggt cccatcatcc ccttcacgt tttatgccac 350
 cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcaccaa 400
 ggataatctc ttcatacaggt tcctgaagcc ctggctggga gaagggatac 450
 tgctgagtgg cggtgacaag tggagccgcc accgtcggat gctgacgcc 500
 gccttcatt tcaacatcct gaagtcctat ataacgatct tcaacaagag 550
 tgcaaacatc atgcttgaca agtggcagca cctggcctca gagggcagca 600
 gtcgtctgga catgtttgag cacatcagcc tcatgacott ggacagtcta 650
 cagaaatgca tcttcagctt tgacagccat tgtcaggaga ggcccagtga 700
 atatattgcc accatcttgg agctcagtgc ccttgtagag aaaagaagcc 750
 agcatatcct ccagcacatg gactttctgt attacctctc ccatgacggg 800
 cggcgcttcc acagggcctg ccgcctggtg catgacttca cagacgctgt 850
 catccgggag cggcgtcgca cctcccccac tcagggtatt gatgattttt 900
 tcaaagacaa agccaagtcc aagacttttg atttcattga tgtgcttctg 950
 ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
 agaggctgac accttcatgt ttggaggcca tgacaccacg gccagtggcc 1050
 tctcctgggt cctgtacaac cttgcgaggc acccagaata ccaggagcgc 1100
 tgccgacagg aggtgcaaga gcttctgaag gaccgcgac ctaaagagat 1150

tgaatgggac gacctggccc agctgccctt cctgaccatg tgcgtgaagg 1200
agagcctgag gttacatccc ccagctccct tcatctcccg atgctgcacc 1250
caggacattg ttctcccaga tggccgagtc atccccaaag gcattacctg 1300
cctcatcgat attatagggg tccatcaciaa cccaactgtg tggccggatc 1350
ctgaggtcta cgaccccttc cgctttgacc cagagaacag caaggggagg 1400
tcacctctgg cttttattcc tttctccgca gggcccagga actgcatcgg 1450
gcaggcggtc gccatggcgg agatgaaagt ggtcctggcg ttgatgctgc 1500
tgcacttccg gttcctgcc a gaccacactg agccccgcag gaagctggaa 1550
ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agccctgaa 1600
tgtaggcttg cagtgacttt ctgacccatc cacctgtttt tttgcagatt 1650
gtcatgaata aaacggtgct gtcaaa 1676

<210> 54
<211> 524
<212> PRT
<213> Homo Sapien

<400> 54
Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala
1 5 10 15
Met Ser Pro Trp Leu Leu Leu Leu Leu Val Val Gly Ser Trp Leu
20 25 30
Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys
35 40 45
Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
50 55 60
Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
65 70 75
Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
80 85 90
Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
95 100 105
Thr Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys
110 115 120
Asp Asn Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly
125 130 135
Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met
140 145 150
Leu Thr Pro Ala Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr
155 160 165
Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp Lys Trp Gln His
170 175 180

Leu	Ala	Ser	Glu	Gly	Ser	Ser	Arg	Leu	Asp	Met	Phe	Glu	His	Ile	185	190	195
Ser	Leu	Met	Thr	Leu	Asp	Ser	Leu	Gln	Lys	Cys	Ile	Phe	Ser	Phe	200	205	210
Asp	Ser	His	Cys	Gln	Glu	Arg	Pro	Ser	Glu	Tyr	Ile	Ala	Thr	Ile	215	220	225
Leu	Glu	Leu	Ser	Ala	Leu	Val	Glu	Lys	Arg	Ser	Gln	His	Ile	Leu	230	235	240
Gln	His	Met	Asp	Phe	Leu	Tyr	Tyr	Leu	Ser	His	Asp	Gly	Arg	Arg	245	250	255
Phe	His	Arg	Ala	Cys	Arg	Leu	Val	His	Asp	Phe	Thr	Asp	Ala	Val	260	265	270
Ile	Arg	Glu	Arg	Arg	Arg	Thr	Leu	Pro	Thr	Gln	Gly	Ile	Asp	Asp	275	280	285
Phe	Phe	Lys	Asp	Lys	Ala	Lys	Ser	Lys	Thr	Leu	Asp	Phe	Ile	Asp	290	295	300
Val	Leu	Leu	Leu	Ser	Lys	Asp	Glu	Asp	Gly	Lys	Ala	Leu	Ser	Asp	305	310	315
Glu	Asp	Ile	Arg	Ala	Glu	Ala	Asp	Thr	Phe	Met	Phe	Gly	Gly	His	320	325	330
Asp	Thr	Thr	Ala	Ser	Gly	Leu	Ser	Trp	Val	Leu	Tyr	Asn	Leu	Ala	335	340	345
Arg	His	Pro	Glu	Tyr	Gln	Glu	Arg	Cys	Arg	Gln	Glu	Val	Gln	Glu	350	355	360
Leu	Leu	Lys	Asp	Arg	Asp	Pro	Lys	Glu	Ile	Glu	Trp	Asp	Asp	Leu	365	370	375
Ala	Gln	Leu	Pro	Phe	Leu	Thr	Met	Cys	Val	Lys	Glu	Ser	Leu	Arg	380	385	390
Leu	His	Pro	Pro	Ala	Pro	Phe	Ile	Ser	Arg	Cys	Cys	Thr	Gln	Asp	395	400	405
Ile	Val	Leu	Pro	Asp	Gly	Arg	Val	Ile	Pro	Lys	Gly	Ile	Thr	Cys	410	415	420
Leu	Ile	Asp	Ile	Ile	Gly	Val	His	His	Asn	Pro	Thr	Val	Trp	Pro	425	430	435
Asp	Pro	Glu	Val	Tyr	Asp	Pro	Phe	Arg	Phe	Asp	Pro	Glu	Asn	Ser	440	445	450
Lys	Gly	Arg	Ser	Pro	Leu	Ala	Phe	Ile	Pro	Phe	Ser	Ala	Gly	Pro	455	460	465
Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val	470	475	480
Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His	485	490	495

Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly
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Gly Leu Trp Leu Arg Val Glu Pro Leu Asn Val Gly Leu Gln
515 520

<210> 55
<211> 644
<212> DNA
<213> Homo Sapien

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tgtgttttgc acttaccctg tgttctgcct tttggtggca taacaaggga 150
cttgcaactta tcttctgcat tttgcagtct ttggcattga cgtggtacag 200
cctttctctc ataccatttg caagggatgc tgtgaagaag tgttttgccg 250
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cagtagcaca ggatgagaag tgggttctgt atcttgtgga gtggaatctt 500
cctcatgtac ctgtttctc tctggatgtt gtcccactga attcccatga 550
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

<210> 56
<211> 77
<212> PRT
<213> Homo Sapien

<400> 56
Met Gly Pro Val Lys Gln Leu Lys Arg Met Phe Glu Pro Thr Arg
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Leu Ile Ala Thr Ile Met Val Leu Leu Cys Phe Ala Leu Thr Leu
20 25 30
Cys Ser Ala Phe Trp Trp His Asn Lys Gly Leu Ala Leu Ile Phe
35 40 45
Cys Ile Leu Gln Ser Leu Ala Leu Thr Trp Tyr Ser Leu Ser Phe
50 55 60
Ile Pro Phe Ala Arg Asp Ala Val Lys Lys Cys Phe Ala Val Cys
65 70 75
Leu Ala

<210> 57

<211> 3334
<212> DNA
<213> Homo Sapien

<400> 57
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cccagaccga gttccagtac tttgagtcga aggggctccc tgccgagctg 150
aagtccattt tcaagctcag tgtcttcac ccctcccagg aattctccac 200
ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250
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aagaagctga ggctggtggt taagattttg gacaaaaaga atgatggacg 350
cattgacgcg caggagatca tgcagtcctt gcgggacttg ggagtcaaga 400
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acgatgacca tcgactggaa cgagtggaga gactaccacc tcctccaccc 500
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<210> 58
 <211> 469
 <212> PRT
 <213> Homo Sapien

<400> 58
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 35 40 45
 Ser Thr Tyr Arg Gln Trp Lys Gln Lys Ile Val Gln Ala Gly Asp
 50 55 60
 Lys Asp Leu Asp Gly Gln Leu Asp Phe Glu Glu Phe Val His Tyr
 65 70 75
 Leu Gln Asp His Glu Lys Lys Leu Arg Leu Val Phe Lys Ile Leu
 80 85 90
 Asp Lys Lys Asn Asp Gly Arg Ile Asp Ala Gln Glu Ile Met Gln
 95 100 105
 Ser Leu Arg Asp Leu Gly Val Lys Ile Ser Glu Gln Gln Ala Glu
 110 115 120
 Lys Ile Leu Lys Ser Met Asp Lys Asn Gly Thr Met Thr Ile Asp
 125 130 135
 Trp Asn Glu Trp Arg Asp Tyr His Leu Leu His Pro Val Glu Asn
 140 145 150
 Ile Pro Glu Ile Ile Leu Tyr Trp Lys His Ser Thr Ile Phe Asp
 155 160 165
 Val Gly Glu Asn Leu Thr Val Pro Asp Glu Phe Thr Val Glu Glu
 170 175 180
 Arg Gln Thr Gly Met Trp Trp Arg His Leu Val Ala Gly Gly Gly
 185 190 195
 Ala Gly Ala Val Ser Arg Thr Cys Thr Ala Pro Leu Asp Arg Leu
 200 205 210
 Lys Val Leu Met Gln Val His Ala Ser Arg Ser Asn Asn Met Gly
 215 220 225

Ile Val Gly Gly Phe Thr Gln Met Ile Arg Glu Gly Gly Ala Arg	230	235	240
Ser Leu Trp Arg Gly Asn Gly Ile Asn Val Leu Lys Ile Ala Pro	245	250	255
Glu Ser Ala Ile Lys Phe Met Ala Tyr Glu Gln Ile Lys Arg Leu	260	265	270
Val Gly Ser Asp Gln Glu Thr Leu Arg Ile His Glu Arg Leu Val	275	280	285
Ala Gly Ser Leu Ala Gly Ala Ile Ala Gln Ser Ser Ile Tyr Pro	290	295	300
Met Glu Val Leu Lys Thr Arg Met Ala Leu Arg Lys Thr Gly Gln	305	310	315
Tyr Ser Gly Met Leu Asp Cys Ala Arg Arg Ile Leu Ala Arg Glu	320	325	330
Gly Val Ala Ala Phe Tyr Lys Gly Tyr Val Pro Asn Met Leu Gly	335	340	345
Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Thr Leu	350	355	360
Lys Asn Ala Trp Leu Gln His Tyr Ala Val Asn Ser Ala Asp Pro	365	370	375
Gly Val Phe Val Leu Leu Ala Cys Gly Thr Met Ser Ser Thr Cys	380	385	390
Gly Gln Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met	395	400	405
Gln Ala Gln Ala Ser Ile Glu Gly Ala Pro Glu Val Thr Met Ser	410	415	420
Ser Leu Phe Lys His Ile Leu Arg Thr Glu Gly Ala Phe Gly Leu	425	430	435
Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val	440	445	450
Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly	455	460	465
Val Gln Ser Arg			

<210> 59
 <211> 1658
 <212> DNA
 <213> Homo Sapien

<400> 59
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atttcagggg gacactccat cacagtcact actgtcgcct cagctgggaa 200
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tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
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ctttgcggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
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cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
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attgccaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800
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aattgactgc cacttcgcaa ctcaggggag gctgcatttt agtaatgggt 1450
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ccaactgaca aatgccaaag ttgagaaaaa tgatcataat ttagcataa 1550
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ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaaa 1658

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<210> 60

<211> 282
 <212> PRT
 <213> Homo Sapien

<400> 60

Met	Ala	Ser	Leu	Gly	Gln	Ile	Leu	Phe	Trp	Ser	Ile	Ile	Ser	Ile	
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Ile	Ile	Ile	Leu	Ala	Gly	Ala	Ile	Ala	Leu	Ile	Ile	Gly	Phe	Gly	
			20						25					30	
Ile	Ser	Gly	Arg	His	Ser	Ile	Thr	Val	Thr	Thr	Val	Ala	Ser	Ala	
			35						40					45	
Gly	Asn	Ile	Gly	Glu	Asp	Gly	Ile	Leu	Ser	Cys	Thr	Phe	Glu	Pro	
			50						55					60	
Asp	Ile	Lys	Leu	Ser	Asp	Ile	Val	Ile	Gln	Trp	Leu	Lys	Glu	Gly	
			65						70					75	
Val	Leu	Gly	Leu	Val	His	Glu	Phe	Lys	Glu	Gly	Lys	Asp	Glu	Leu	
			80						85					90	
Ser	Glu	Gln	Asp	Glu	Met	Phe	Arg	Gly	Arg	Thr	Ala	Val	Phe	Ala	
			95						100					105	
Asp	Gln	Val	Ile	Val	Gly	Asn	Ala	Ser	Leu	Arg	Leu	Lys	Asn	Val	
			110						115					120	
Gln	Leu	Thr	Asp	Ala	Gly	Thr	Tyr	Lys	Cys	Tyr	Ile	Ile	Thr	Ser	
			125						130					135	
Lys	Gly	Lys	Gly	Asn	Ala	Asn	Leu	Glu	Tyr	Lys	Thr	Gly	Ala	Phe	
			140						145					150	
Ser	Met	Pro	Glu	Val	Asn	Val	Asp	Tyr	Asn	Ala	Ser	Ser	Glu	Thr	
			155						160					165	
Leu	Arg	Cys	Glu	Ala	Pro	Arg	Trp	Phe	Pro	Gln	Pro	Thr	Val	Val	
			170						175					180	
Trp	Ala	Ser	Gln	Val	Asp	Gln	Gly	Ala	Asn	Phe	Ser	Glu	Val	Ser	
			185						190					195	
Asn	Thr	Ser	Phe	Glu	Leu	Asn	Ser	Glu	Asn	Val	Thr	Met	Lys	Val	
			200						205					210	
Val	Ser	Val	Leu	Tyr	Asn	Val	Thr	Ile	Asn	Asn	Thr	Tyr	Ser	Cys	
			215						220					225	
Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val	
			230						235					240	
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn	
			245						250					255	
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp	
			260						265					270	
Ala	Leu	Leu	Pro	Leu	Ser	Pro	Tyr	Leu	Met	Leu	Lys				
			275						280						

<210> 61

<211> 1617
<212> DNA
<213> Homo Sapien

<400> 61
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<210> 62
 <211> 284
 <212> PRT
 <213> Homo Sapien

<400> 62
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 Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
 35 40 45
 Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
 50 55 60
 Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
 65 70 75
 Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr
 80 85 90
 Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu
 95 100 105
 Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr
 110 115 120
 Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser
 125 130 135
 Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser
 140 145 150
 Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys
 155 160 165
 Thr Lys Ser Gly Arg Ile Asp Val Tyr Gly Phe Ser Ala Leu Trp
 170 175 180
 Lys Phe Ile Gln Gln Trp Lys Asn Leu Phe Gln Gln Tyr Asp Arg
 185 190 195
 Asp Arg Ser Gly Ser Ile Ser Tyr Thr Glu Leu Gln Gln Ala Leu
 200 205 210
 Ser Gln Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln Leu Leu
 215 220 225
 Val Ser Arg Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln Leu
 230 235 240
 Asp Arg Phe Ile Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu

	245		250		255
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	260		265		270
Ser Phe Glu Asp Phe Val Thr Met Thr Ala Ser Arg Met Leu					
	275		280		

<210> 63
 <211> 1234
 <212> DNA
 <213> Homo Sapien

<400> 63
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 ccacaccctg agggaatctg gggtagcaat aatcaacccc caggtagcag 750
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 64
 Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
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 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45
 Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
 50 55 60
 Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
 65 70 75
 Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
 80 85 90
 Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
 95 100 105
 Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
 110 115 120
 Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
 125 130 135
 Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
 140 145 150
 Leu Pro Gly Glu Ser Ser Pro Asp Ala Thr Gly Leu Ser Pro Glu
 155 160 165
 Ala Ser Leu Leu His Gln Asp Ser Glu Ser Arg Arg Leu Pro Arg
 170 175 180
 Ser Asn Ser Leu Gly Ala Gly Gly Lys Ile Leu Ser Gln Arg Pro
 185 190 195
 Pro Trp Ser Leu Ile His Arg Val Leu Pro Asp His Pro Trp Gly
 200 205 210
 Thr Leu Asn Pro Ser Val Ser Trp Gly Gly Gly Gly Pro Gly Thr
 215 220 225
 Gly Trp Gly Thr Arg Pro Met Pro His Pro Glu Gly Ile Trp Gly
 230 235 240
 Ile Asn Asn Gln Pro Pro Gly Thr Ser Trp Gly Asn Ile Asn Arg
 245 250 255
 Tyr Pro Gly Gly Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly
 260 265 270
 Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly Ser Trp Gly Asn
 275 280 285

Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val
				290					295					300
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro
				305					310					315
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly					
				320					325					

<210> 65
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 65
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 gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
 gagtcttttc tgacaaattc ctccatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgcctcctcc tccatctccc ttcagggacc agcgtcaccc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct tttgggcccgg ggatgcagga 350
 ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400
 ataaataaaa ttcggtatgc tg 422

<210> 66
 <211> 78
 <212> PRT
 <213> Homo Sapien

Met	Gly	Ser	Gly	Leu	Pro	Leu	Val	Leu	Leu	Leu	Thr	Leu	Leu	Gly
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Ser	Ser	His	Gly	Thr	Gly	Pro	Gly	Met	Thr	Leu	Gln	Leu	Lys	Leu
				20					25					30
Lys	Glu	Ser	Phe	Leu	Thr	Asn	Ser	Ser	Tyr	Glu	Ser	Ser	Phe	Leu
				35					40					45
Glu	Leu	Leu	Glu	Lys	Leu	Cys	Leu	Leu	Leu	His	Leu	Pro	Ser	Gly
				50					55					60
Thr	Ser	Val	Thr	Leu	His	His	Ala	Arg	Ser	Gln	His	His	Val	Val
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Cys	Asn	Thr												

<210> 67
 <211> 744
 <212> DNA
 <213> Homo Sapien

<400> 67

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<210> 68
 <211> 123
 <212> PRT
 <213> Homo Sapien

<400> 68
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 Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
 35 40 45
 Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
 50 55 60
 Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
 65 70 75
 Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
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 Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala
 95 100 105
 Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
 110 115 120
 Leu Pro Ile

<210> 69
 <211> 3265
 <212> DNA
 <213> Homo Sapien

<400> 69
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 ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200
 ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250
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<210> 70
<211> 919
<212> PRT
<213> Homo Sapien

<400> 70
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Phe Glu Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp
35 40 45
Glu Lys Ile Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser
50 55 60
Thr Tyr Leu Phe Glu Ala Thr Glu Lys Arg Phe Phe Phe Lys Asn
65 70 75
Val Ser Ile Leu Ile Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr
80 85 90
Lys Arg Pro Lys His Glu Asn His Lys His Ala Asp Val Ile Val
95 100 105
Ala Pro Pro Thr Leu Pro Gly Arg Asp Glu Pro Tyr Thr Lys Gln
110 115 120
Phe Thr Glu Cys Gly Glu Lys Gly Glu Tyr Ile His Phe Thr Pro
125 130 135
Asp Leu Leu Leu Gly Lys Lys Gln Asn Glu Tyr Gly Pro Pro Gly
140 145 150
Lys Leu Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe
155 160 165
Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg Ala Lys Ser Lys
170 175 180
Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser Gly Arg Asn
185 190 195
Arg Val Tyr Lys Cys Gln Gly Gly Ser Cys Leu Ser Arg Ala Cys
200 205 210
Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln Phe
215 220 225
Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met
230 235 240

Gln	Ser	Ile	Asp	Ser	Val	Val	Glu	Phe	Cys	Asn	Glu	Lys	Thr	His	245	250	255
Asn	Gln	Glu	Ala	Pro	Ser	Leu	Gln	Asn	Ile	Lys	Cys	Asn	Phe	Arg	260	265	270
Ser	Thr	Trp	Glu	Val	Ile	Ser	Asn	Ser	Glu	Asp	Phe	Lys	Asn	Thr	275	280	285
Ile	Pro	Met	Val	Thr	Pro	Pro	Pro	Pro	Pro	Val	Phe	Ser	Leu	Leu	290	295	300
Lys	Ile	Ser	Gln	Arg	Ile	Val	Cys	Leu	Val	Leu	Asp	Lys	Ser	Gly	305	310	315
Ser	Met	Gly	Gly	Lys	Asp	Arg	Leu	Asn	Arg	Met	Asn	Gln	Ala	Ala	320	325	330
Lys	His	Phe	Leu	Leu	Gln	Thr	Val	Glu	Asn	Gly	Ser	Trp	Val	Gly	335	340	345
Met	Val	His	Phe	Asp	Ser	Thr	Ala	Thr	Ile	Val	Asn	Lys	Leu	Ile	350	355	360
Gln	Ile	Lys	Ser	Ser	Asp	Glu	Arg	Asn	Thr	Leu	Met	Ala	Gly	Leu	365	370	375
Pro	Thr	Tyr	Pro	Leu	Gly	Gly	Thr	Ser	Ile	Cys	Ser	Gly	Ile	Lys	380	385	390
Tyr	Ala	Phe	Gln	Val	Ile	Gly	Glu	Leu	His	Ser	Gln	Leu	Asp	Gly	395	400	405
Ser	Glu	Val	Leu	Leu	Leu	Thr	Asp	Gly	Glu	Asp	Asn	Thr	Ala	Ser	410	415	420
Ser	Cys	Ile	Asp	Glu	Val	Lys	Gln	Ser	Gly	Ala	Ile	Val	His	Phe	425	430	435
Ile	Ala	Leu	Gly	Arg	Ala	Ala	Asp	Glu	Ala	Val	Ile	Glu	Met	Ser	440	445	450
Lys	Ile	Thr	Gly	Gly	Ser	His	Phe	Tyr	Val	Ser	Asp	Glu	Ala	Gln	455	460	465
Asn	Asn	Gly	Leu	Ile	Asp	Ala	Phe	Gly	Ala	Leu	Thr	Ser	Gly	Asn	470	475	480
Thr	Asp	Leu	Ser	Gln	Lys	Ser	Leu	Gln	Leu	Glu	Ser	Lys	Gly	Leu	485	490	495
Thr	Leu	Asn	Ser	Asn	Ala	Trp	Met	Asn	Asp	Thr	Val	Ile	Ile	Asp	500	505	510
Ser	Thr	Val	Gly	Lys	Asp	Thr	Phe	Phe	Leu	Ile	Thr	Trp	Asn	Ser	515	520	525
Leu	Pro	Pro	Ser	Ile	Ser	Leu	Trp	Asp	Pro	Ser	Gly	Thr	Ile	Met	530	535	540
Glu	Asn	Phe	Thr	Val	Asp	Ala	Thr	Ser	Lys	Met	Ala	Tyr	Leu	Ser	545	550	555

Ile	Pro	Gly	Thr	Ala	Lys	Val	Gly	Thr	Trp	Ala	Tyr	Asn	Leu	Gln	560	565	570
Ala	Lys	Ala	Asn	Pro	Glu	Thr	Leu	Thr	Ile	Thr	Val	Thr	Ser	Arg	575	580	585
Ala	Ala	Asn	Ser	Ser	Val	Pro	Pro	Ile	Thr	Val	Asn	Ala	Lys	Met	590	595	600
Asn	Lys	Asp	Val	Asn	Ser	Phe	Pro	Ser	Pro	Met	Ile	Val	Tyr	Ala	605	610	615
Glu	Ile	Leu	Gln	Gly	Tyr	Val	Pro	Val	Leu	Gly	Ala	Asn	Val	Thr	620	625	630
Ala	Phe	Ile	Glu	Ser	Gln	Asn	Gly	His	Thr	Glu	Val	Leu	Glu	Leu	635	640	645
Leu	Asp	Asn	Gly	Ala	Gly	Ala	Asp	Ser	Phe	Lys	Asn	Asp	Gly	Val	650	655	660
Tyr	Ser	Arg	Tyr	Phe	Thr	Ala	Tyr	Thr	Glu	Asn	Gly	Arg	Tyr	Ser	665	670	675
Leu	Lys	Val	Arg	Ala	His	Gly	Gly	Ala	Asn	Thr	Ala	Arg	Leu	Lys	680	685	690
Leu	Arg	Pro	Pro	Leu	Asn	Arg	Ala	Ala	Tyr	Ile	Pro	Gly	Trp	Val	695	700	705
Val	Asn	Gly	Glu	Ile	Glu	Ala	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asp	710	715	720
Glu	Asp	Thr	Gln	Thr	Thr	Leu	Glu	Asp	Phe	Ser	Arg	Thr	Ala	Ser	725	730	735
Gly	Gly	Ala	Phe	Val	Val	Ser	Gln	Val	Pro	Ser	Leu	Pro	Leu	Pro	740	745	750
Asp	Gln	Tyr	Pro	Pro	Ser	Gln	Ile	Thr	Asp	Leu	Asp	Ala	Thr	Val	755	760	765
His	Glu	Asp	Lys	Ile	Ile	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asn	770	775	780
Phe	Asp	Val	Gly	Lys	Val	Gln	Arg	Tyr	Ile	Ile	Arg	Ile	Ser	Ala	785	790	795
Ser	Ile	Leu	Asp	Leu	Arg	Asp	Ser	Phe	Asp	Asp	Ala	Leu	Gln	Val	800	805	810
Asn	Thr	Thr	Asp	Leu	Ser	Pro	Lys	Glu	Ala	Asn	Ser	Lys	Glu	Ser	815	820	825
Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His	830	835	840
Ile	Phe	Ile	Ala	Ile	Lys	Ser	Ile	Asp	Lys	Ser	Asn	Leu	Thr	Ser	845	850	855
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala	860	865	870

Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro	
				875					880					885	
Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu	
				890					895					900	
Val	Leu	Ser	Val	Ile	Gly	Ser	Val	Val	Ile	Val	Asn	Phe	Ile	Leu	
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Ser	Thr	Thr	Ile												

<210> 71
 <211> 3877
 <212> DNA
 <213> Homo Sapien

<400> 71
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<210> 72

<211> 532

<212> PRT

<213> Homo Sapien

<400> 72

Met	Met	Met	Val	Arg	Arg	Gly	Leu	Leu	Ala	Trp	Ile	Ser	Arg	Val
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Val	Val	Leu	Leu	Val	Leu	Leu	Cys	Cys	Ala	Ile	Ser	Val	Leu	Tyr
				20					25					30

Met	Leu	Ala	Cys	Thr	Pro	Lys	Gly	Asp	Glu	Glu	Gln	Leu	Ala	Leu
				35					40					45

Pro	Arg	Ala	Asn	Ser	Pro	Thr	Gly	Lys	Glu	Gly	Tyr	Gln	Ala	Val
				50					55					60

Leu	Gln	Glu	Trp	Glu	Glu	Gln	His	Arg	Asn	Tyr	Val	Ser	Ser	Leu		65	70	75
Lys	Arg	Gln	Ile	Ala	Gln	Leu	Lys	Glu	Glu	Leu	Gln	Glu	Arg	Ser		80	85	90
Glu	Gln	Leu	Arg	Asn	Gly	Gln	Tyr	Gln	Ala	Ser	Asp	Ala	Ala	Gly		95	100	105
Leu	Gly	Leu	Asp	Arg	Ser	Pro	Pro	Glu	Lys	Thr	Gln	Ala	Asp	Leu		110	115	120
Leu	Ala	Phe	Leu	His	Ser	Gln	Val	Asp	Lys	Ala	Glu	Val	Asn	Ala		125	130	135
Gly	Val	Lys	Leu	Ala	Thr	Glu	Tyr	Ala	Ala	Val	Pro	Phe	Asp	Ser		140	145	150
Phe	Thr	Leu	Gln	Lys	Val	Tyr	Gln	Leu	Glu	Thr	Gly	Leu	Thr	Arg		155	160	165
His	Pro	Glu	Glu	Lys	Pro	Val	Arg	Lys	Asp	Lys	Arg	Asp	Glu	Leu		170	175	180
Val	Glu	Ala	Ile	Glu	Ser	Ala	Leu	Glu	Thr	Leu	Asn	Asn	Pro	Ala		185	190	195
Glu	Asn	Ser	Pro	Asn	His	Arg	Pro	Tyr	Thr	Ala	Ser	Asp	Phe	Ile		200	205	210
Glu	Gly	Ile	Tyr	Arg	Thr	Glu	Arg	Asp	Lys	Gly	Thr	Leu	Tyr	Glu		215	220	225
Leu	Thr	Phe	Lys	Gly	Asp	His	Lys	His	Glu	Phe	Lys	Arg	Leu	Ile		230	235	240
Leu	Phe	Arg	Pro	Phe	Ser	Pro	Ile	Met	Lys	Val	Lys	Asn	Glu	Lys		245	250	255
Leu	Asn	Met	Ala	Asn	Thr	Leu	Ile	Asn	Val	Ile	Val	Pro	Leu	Ala		260	265	270
Lys	Arg	Val	Asp	Lys	Phe	Arg	Gln	Phe	Met	Gln	Asn	Phe	Arg	Glu		275	280	285
Met	Cys	Ile	Glu	Gln	Asp	Gly	Arg	Val	His	Leu	Thr	Val	Val	Tyr		290	295	300
Phe	Gly	Lys	Glu	Glu	Ile	Asn	Glu	Val	Lys	Gly	Ile	Leu	Glu	Asn		305	310	315
Thr	Ser	Lys	Ala	Ala	Asn	Phe	Arg	Asn	Phe	Thr	Phe	Ile	Gln	Leu		320	325	330
Asn	Gly	Glu	Phe	Ser	Arg	Gly	Lys	Gly	Leu	Asp	Val	Gly	Ala	Arg		335	340	345
Phe	Trp	Lys	Gly	Ser	Asn	Val	Leu	Leu	Phe	Phe	Cys	Asp	Val	Asp		350	355	360
Ile	Tyr	Phe	Thr	Ser	Glu	Phe	Leu	Asn	Thr	Cys	Arg	Leu	Asn	Thr		365	370	375

Gln	Pro	Gly	Lys	Lys	Val	Phe	Tyr	Pro	Val	Leu	Phe	Ser	Gln	Tyr	
				380					385					390	
Asn	Pro	Gly	Ile	Ile	Tyr	Gly	His	His	Asp	Ala	Val	Pro	Pro	Leu	
				395					400					405	
Glu	Gln	Gln	Leu	Val	Ile	Lys	Lys	Glu	Thr	Gly	Phe	Trp	Arg	Asp	
				410					415					420	
Phe	Gly	Phe	Gly	Met	Thr	Cys	Gln	Tyr	Arg	Ser	Asp	Phe	Ile	Asn	
				425					430					435	
Ile	Gly	Gly	Phe	Asp	Leu	Asp	Ile	Lys	Gly	Trp	Gly	Gly	Glu	Asp	
				440					445					450	
Val	His	Leu	Tyr	Arg	Lys	Tyr	Leu	His	Ser	Asn	Leu	Ile	Val	Val	
				455					460					465	
Arg	Thr	Pro	Val	Arg	Gly	Leu	Phe	His	Leu	Trp	His	Glu	Lys	Arg	
				470					475					480	
Cys	Met	Asp	Glu	Leu	Thr	Pro	Glu	Gln	Tyr	Lys	Met	Cys	Met	Gln	
				485					490					495	
Ser	Lys	Ala	Met	Asn	Glu	Ala	Ser	His	Gly	Gln	Leu	Gly	Met	Leu	
				500					505					510	
Val	Phe	Arg	His	Glu	Ile	Glu	Ala	His	Leu	Arg	Lys	Gln	Lys	Gln	
				515					520					525	
Lys	Thr	Ser	Ser	Lys	Lys	Thr									
				530											

<210> 73
 <211> 1701
 <212> DNA
 <213> Homo Sapien

<220>
 <221> unsure
 <222> 1528
 <223> unknown base

<400> 73
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 cacgccagga gctcgctcgc tctctctctc tctctctcac tcttccctcc 200
 ctctctctct gctgtccta gtctcttagt cctcaaattc ccagtccct 250
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<210> 74

<211> 337

<212> PRT

<213> Homo Sapien

<400> 74

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Ala	Asp	Gly	Gly	Gln	His	Trp	Thr	Tyr	Glu	Gly	Pro	His	Gly	Gln
				20				25					30	

Asp	His	Trp	Pro	Ala	Ser	Tyr	Pro	Glu	Cys	Gly	Asn	Asn	Ala	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35										40					45				
Ser	Pro	Ile	Asp	Ile	Gln	Thr	Asp	Ser	Val	Thr	Phe	Asp	Pro	Asp					
				50					55					60					
Leu	Pro	Ala	Leu	Gln	Pro	His	Gly	Tyr	Asp	Gln	Pro	Gly	Thr	Glu					
				65					70					75					
Pro	Leu	Asp	Leu	His	Asn	Asn	Gly	His	Thr	Val	Gln	Leu	Ser	Leu					
				80					85					90					
Pro	Ser	Thr	Leu	Tyr	Leu	Gly	Gly	Leu	Pro	Arg	Lys	Tyr	Val	Ala					
				95					100					105					
Ala	Gln	Leu	His	Leu	His	Trp	Gly	Gln	Lys	Gly	Ser	Pro	Gly	Gly					
				110					115					120					
Ser	Glu	His	Gln	Ile	Asn	Ser	Glu	Ala	Thr	Phe	Ala	Glu	Leu	His					
				125					130					135					
Ile	Val	His	Tyr	Asp	Ser	Asp	Ser	Tyr	Asp	Ser	Leu	Ser	Glu	Ala					
				140					145					150					
Ala	Glu	Arg	Pro	Gln	Gly	Leu	Ala	Val	Leu	Gly	Ile	Leu	Ile	Glu					
				155					160					165					
Val	Gly	Glu	Thr	Lys	Asn	Ile	Ala	Tyr	Glu	His	Ile	Leu	Ser	His					
				170					175					180					
Leu	His	Glu	Val	Arg	His	Lys	Asp	Gln	Lys	Thr	Ser	Val	Pro	Pro					
				185					190					195					
Phe	Asn	Leu	Arg	Glu	Leu	Leu	Pro	Lys	Gln	Leu	Gly	Gln	Tyr	Phe					
				200					205					210					
Arg	Tyr	Asn	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	Tyr	Gln	Ser	Val					
				215					220					225					
Leu	Trp	Thr	Val	Phe	Tyr	Arg	Arg	Ser	Gln	Ile	Ser	Met	Glu	Gln					
				230					235					240					
Leu	Glu	Lys	Leu	Gln	Gly	Thr	Leu	Phe	Ser	Thr	Glu	Glu	Glu	Pro					
				245					250					255					
Ser	Lys	Leu	Leu	Val	Gln	Asn	Tyr	Arg	Ala	Leu	Gln	Pro	Leu	Asn					
				260					265					270					
Gln	Arg	Met	Val	Phe	Ala	Ser	Phe	Ile	Gln	Ala	Gly	Ser	Ser	Tyr					
				275					280					285					
Thr	Thr	Gly	Glu	Met	Leu	Ser	Leu	Gly	Val	Gly	Ile	Leu	Val	Gly					
				290					295					300					
Cys	Leu	Cys	Leu	Leu	Leu	Ala	Val	Tyr	Phe	Ile	Ala	Arg	Lys	Ile					
				305					310					315					
Arg	Lys	Lys	Arg	Leu	Glu	Asn	Arg	Lys	Ser	Val	Val	Phe	Thr	Ser					
				320					325					330					
Ala	Gln	Ala	Thr	Thr	Glu	Ala													
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<210> 75

<211> 1743
<212> DNA
<213> Homo Sapien

<400> 75
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cccaccagag gtggcactga ctacagatga gaagtcatt tctgttgctc 250
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<210> 76
 <211> 442
 <212> PRT
 <213> Homo Sapien

<400> 76
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 20 25 30
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 35 40 45
 Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
 50 55 60
 Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
 65 70 75
 Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
 80 85 90
 Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val
 95 100 105
 His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro
 110 115 120
 Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu
 125 130 135
 Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile
 140 145 150
 Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr
 155 160 165
 Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile Leu Ile
 170 175 180
 Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys
 185 190 195
 Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys
 200 205 210
 Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val
 215 220 225

Ser	Ser	Leu	Asn	Asp	Pro	Gln	Pro	Ser	Gly	Asn	Leu	Arg	Pro	Pro	230	235	240
Gln	Glu	Glu	Glu	Glu	Val	Lys	His	Leu	Gly	Tyr	Ala	Ser	His	Leu	245	250	255
Met	Glu	Ile	Phe	Cys	Asp	Ser	Glu	Glu	Asn	Thr	Glu	Gly	Thr	Ser	260	265	270
Leu	Thr	Gln	Gln	Glu	Ser	Leu	Ser	Arg	Thr	Ile	Pro	Pro	Asp	Lys	275	280	285
Thr	Val	Ile	Glu	Tyr	Glu	Tyr	Asp	Val	Arg	Thr	Thr	Asp	Ile	Cys	290	295	300
Ala	Gly	Pro	Glu	Glu	Gln	Glu	Leu	Ser	Leu	Gln	Glu	Glu	Val	Ser	305	310	315
Thr	Gln	Gly	Thr	Leu	Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu	320	325	330
Gly	Pro	Gln	Thr	Leu	Gln	Tyr	Ser	Tyr	Thr	Pro	Gln	Leu	Gln	Asp	335	340	345
Leu	Asp	Pro	Leu	Ala	Gln	Glu	His	Thr	Asp	Ser	Glu	Glu	Gly	Pro	350	355	360
Glu	Glu	Glu	Pro	Ser	Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr	365	370	375
Gly	Arg	Leu	Cys	Ile	Pro	Ser	Leu	Ser	Ser	Phe	Asp	Gln	Asp	Ser	380	385	390
Glu	Gly	Cys	Glu	Pro	Ser	Glu	Gly	Asp	Gly	Leu	Gly	Glu	Glu	Gly	395	400	405
Leu	Leu	Ser	Arg	Leu	Tyr	Glu	Glu	Pro	Ala	Pro	Asp	Arg	Pro	Pro	410	415	420
Gly	Glu	Asn	Glu	Thr	Tyr	Leu	Met	Gln	Phe	Met	Glu	Glu	Trp	Gly	425	430	435
Leu	Tyr	Val	Gln	Met	Glu	Asn									440		

<210> 77

<211> 1636

<212> DNA

<213> Homo Sapien

<400> 77

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<210> 78

<211> 484

<212> PRT

<213> Homo Sapien

<400> 78

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Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile	20	25	30
Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys	35	40	45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser	50	55	60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser	65	70	75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile	80	85	90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp	95	100	105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe	110	115	120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr	125	130	135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro	140	145	150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu	155	160	165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu	170	175	180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu	185	190	195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly	200	205	210
Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu	215	220	225
Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys	230	235	240
Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser	245	250	255
Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu	260	265	270
Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser	275	280	285
Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu	290	295	300
Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His	305	310	315
Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp	320	325	330

Lys	Leu	Gly	Ser	Thr	Gln	Ile	Val	Lys	Ile	Leu	Thr	Gln	Asp	Thr	
				335					340					345	
Pro	Glu	Phe	Phe	Ile	Asp	Gln	Gly	His	Ala	Lys	Val	Ala	Gln	Leu	
				350					355					360	
Ile	Val	Leu	Glu	Val	Phe	Pro	Ser	Ser	Glu	Ala	Leu	Arg	Pro	Leu	
				365					370					375	
Phe	Thr	Leu	Gly	Ile	Glu	Ala	Ser	Ser	Glu	Ala	Gln	Phe	Tyr	Thr	
				380					385					390	
Lys	Gly	Asp	Gln	Leu	Ile	Leu	Asn	Leu	Asn	Asn	Ile	Ser	Ser	Asp	
				395					400					405	
Arg	Ile	Gln	Leu	Met	Asn	Ser	Gly	Ile	Gly	Trp	Phe	Gln	Pro	Asp	
				410					415					420	
Val	Leu	Lys	Asn	Ile	Ile	Thr	Glu	Ile	Ile	His	Ser	Ile	Leu	Leu	
				425					430					435	
Pro	Asn	Gln	Asn	Gly	Lys	Leu	Arg	Ser	Gly	Val	Pro	Val	Ser	Leu	
				440					445					450	
Val	Lys	Ala	Leu	Gly	Phe	Glu	Ala	Ala	Glu	Ser	Ser	Leu	Thr	Lys	
				455					460					465	
Asp	Ala	Leu	Val	Leu	Thr	Pro	Ala	Ser	Leu	Trp	Lys	Pro	Ser	Ser	
				470					475					480	
Pro Val Ser Gln															

<210> 79
 <211> 1475
 <212> DNA
 <213> Homo Sapien

<400> 79
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 ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
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 gttggcttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
 catcaccag tgtgacatct atagcaccct tctgggcctg cccgctgaca 350
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tggagaggct ctttacttgg gcattatttc ttccctgttc tccctgatag 650
 ctggaatcat cctctgcttt tctgtctcat cccagagaaa tcgctccaac 700
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 ccctctctct ggctgaggtt ggctcttagc tcattgctgg ggatgggaag 1250
 gagaagcagt ggcttttgtg ggcattgctc taacctactt ctcaagcttc 1300
 cctccaaaga aactgattgg ccctggaacc tccatcccac tcttgttatg 1350
 actccacagt gtccagacta atttgtgcat gaactgaaat aaaaccatcc 1400
 tacggtatcc aggggaacaga aagcaggatg caggatggga ggacaggaag 1450
 gcagcctggg acattttaaaa aaata 1475

<210> 80
 <211> 230
 <212> PRT
 <213> Homo Sapien

<400> 80
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 Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp
 20 25 30
 Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
 35 40 45
 Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
 50 55 60
 Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
 65 70 75
 Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
 80 85 90
 Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
 95 100 105

Val	Phe	Cys	Gln	Glu	Ser	Arg	Ala	Lys	Asp	Arg	Val	Ala	Val	Ala	
				110					115					120	
Gly	Gly	Val	Phe	Phe	Ile	Leu	Gly	Gly	Leu	Leu	Gly	Phe	Ile	Pro	
				125					130					135	
Val	Ala	Trp	Asn	Leu	His	Gly	Ile	Leu	Arg	Asp	Phe	Tyr	Ser	Pro	
				140					145					150	
Leu	Val	Pro	Asp	Ser	Met	Lys	Phe	Glu	Ile	Gly	Glu	Ala	Leu	Tyr	
				155					160					165	
Leu	Gly	Ile	Ile	Ser	Ser	Leu	Phe	Ser	Leu	Ile	Ala	Gly	Ile	Ile	
				170					175					180	
Leu	Cys	Phe	Ser	Cys	Ser	Ser	Gln	Arg	Asn	Arg	Ser	Asn	Tyr	Tyr	
				185					190					195	
Asp	Ala	Tyr	Gln	Ala	Gln	Pro	Leu	Ala	Thr	Arg	Ser	Ser	Pro	Arg	
				200					205					210	
Pro	Gly	Gln	Pro	Pro	Lys	Val	Lys	Ser	Glu	Phe	Asn	Ser	Tyr	Ser	
				215					220					225	
Leu	Thr	Gly	Tyr	Val											
				230											

<210> 81
 <211> 1732
 <212> DNA
 <213> Homo Sapien

<400> 81
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 cttagacctc ccttcctgcc ctctttctct gccacccgct gcttcctggc 150
 ccttctccga ccccgctcta gcagcagacc tcctgggggc tgtgggttga 200
 tctgtggccc ctgtgcctcc gtgtcctttt cgtctccctt cctcccgact 250
 ccgctcccg accagcggcc tgaccctggg gaaaggatgg ttcccgaggt 300
 gagggtctc tcctccttgc tgggactcgc gctgctctgg ttccccctgg 350
 actcccacgc tcgagcccg ccagacatgt tctgcctttt ccatgggaag 400
 agatactccc ccggcgagag ctggcaccct tacttgagc cacaaggcct 450
 gatgtactgc ctgcgctgta cctgctcaga gggcgcccat gtgagttgtt 500
 accgcctcca ctgtccgcct gtccactgcc ccagcctgt gacggagcca 550
 cagcaatgct gtcccaagtg tgtggaacct cacactcct ctggactccg 600
 ggccccacca aagtctgcc agcacaacgg gaccatgtac caacacggag 650
 agatcttcag tgcccatgag ctgttccct cccgcctgcc caaccagtgt 700
 gtcctctgca gctgcacaga gggccagatc tactgcggcc tcacaacctg 750

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aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
cagtcgctcc atggggtgag acatcctcag gatccatgtt ccagtgatgc 900
tgggagaaag agaggcccgg gcaccccagc cccactggc ctcagcgccc 950
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actgtcaaga tcgtcctgaa ggagaaacat aagaaagcct gtgtgcatgg 1050
cggaagacg tactcccacg gggaggtgtg gcacccggcc ttccgtgcct 1100
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ctcgtccaca catcggtatc cccaagccca gacaacctgc gtcgctttgc 1350
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taaaagatga ggaaactgag gctcagagag gtgaagtacc tggcccaagg 1450
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ggccagtcca gacaaagtga ccaagacata acaaagacct aacagttgca 1650
gatatgagct gtataattgt tgttattata tattaataaa taagaagttg 1700
cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

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<210> 82
<211> 451
<212> PRT
<213> Homo Sapien

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<400> 82
Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
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Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
          20          25          30
Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
          35          40          45
Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
          50          55          60
Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
          65          70          75
Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
          80          85          90

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Cys	Cys	Pro	Lys	Cys	Val	Glu	Pro	His	Thr	Pro	Ser	Gly	Leu	Arg	95	100	105
Ala	Pro	Pro	Lys	Ser	Cys	Gln	His	Asn	Gly	Thr	Met	Tyr	Gln	His	110	115	120
Gly	Glu	Ile	Phe	Ser	Ala	His	Glu	Leu	Phe	Pro	Ser	Arg	Leu	Pro	125	130	135
Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys	140	145	150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro	155	160	165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu	170	175	180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg	185	190	195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly	200	205	210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe	215	220	225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val	230	235	240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly	245	250	255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg	260	265	270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly	275	280	285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys	290	295	300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro	305	310	315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg	320	325	330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser	335	340	345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala	350	355	360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu	365	370	375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His	380	385	390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala	395	400	405

Arg	Leu	Pro	Glu	Arg	Gly	Thr	Ala	Leu	Pro	Thr	Ala	Arg	Trp	Pro
				410					415					420
Pro	Arg	Arg	Ser	Leu	Glu	Arg	Leu	Pro	Ser	Pro	Asp	Pro	Gly	Ala
				425					430					435
Glu	Gly	His	Gly	Gln	Ser	Arg	Gln	Ser	Asp	Gln	Asp	Ile	Thr	Lys
				440					445					450

Thr

<210> 83
 <211> 2052
 <212> DNA
 <213> Homo Sapien

<400> 83
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 ccgctcacgc agagcctctc cgtggcttcc gcaccttgag cattaggcca 100
 gttctcctct tctctctaatt ccatccgtca cctctcctgt catccgtttc 150
 catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200
 ttgggttctga gtctcctcaa gctgggatca gggcagtggc aggtgtttgg 250
 gccagacaag cctgtccagg ccttgggtggg ggaggacgca gcattctcct 300
 gtttctctgtc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350
 agggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400
 gccatattatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450
 attctattgc ggagggggcg atctctctga ggctggaaaa cattactgtg 500
 ttggatgctg gcctctatgg gtgcaggatt agttcccagt cttactacca 550
 gaaggccatc tgggagctac aggtgtcagc actgggctca gttcctctca 600
 tttccatcac gggatatgtt gatagagaca tccagctact ctgtcagtcc 650
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 tccatgcggc atgctcatct gagccgagag gtggaatcca gggtagagat 850
 aggagatacc tttttcgagc ctatatcgtg gcacctggct accaaagtac 900
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 aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctgagaa 1150

gagatttaca aggaagagtg tgggtggcttc tcagagtttc caagcagggg 1200
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acagagtgta tcctaattgg ttgttcatta tattacactt tcagtaaaaa 2050
aa 2052

<210> 84
<211> 500
<212> PRT
<213> Homo Sapien

<400> 84
Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly
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Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
20 25 30
Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
35 40 45
Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe
50 55 60
Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe
65 70 75
Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp
80 85 90
Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr

95					100					105				
Val	Leu	Asp	Ala	Gly	Leu	Tyr	Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser
				110					115					120
Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	Leu	Gln	Val	Ser	Ala	Leu	Gly
				125					130					135
Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	Tyr	Val	Asp	Arg	Asp	Ile
				140					145					150
Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	Pro	Arg	Pro	Thr	Ala
				155					160					165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Thr	Asp	Ser	Arg
				170					175					180
Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	Ile	Ser	Leu
				185					190					195
Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	Arg	His
				200					205					210
Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	Asp
				215					220					225
Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu
				230					235					240
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys
				245					250					255
Ile	Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp
				260					265					270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys
				275					280					285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys
				290					295					300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro
				305					310					315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val
				320					325					330
Val	Ala	Ser	Gln	Ser	Phe	Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val
				335					340					345
Asp	Gly	Gly	His	Asn	Lys	Arg	Trp	Arg	Val	Gly	Val	Cys	Arg	Asp
				350					355					360
Asp	Val	Asp	Arg	Arg	Lys	Glu	Tyr	Val	Thr	Leu	Ser	Pro	Asp	His
				365					370					375
Gly	Tyr	Trp	Val	Leu	Arg	Leu	Asn	Gly	Glu	His	Leu	Tyr	Phe	Thr
				380					385					390
Leu	Asn	Pro	Arg	Phe	Ile	Ser	Val	Phe	Pro	Arg	Thr	Pro	Pro	Thr
				395					400					405
Lys	Ile	Gly	Val	Phe	Leu	Asp	Tyr	Glu	Cys	Gly	Thr	Ile	Ser	Phe

410	415	420
Phe Asn Ile Asn Asp Gln Ser Leu Ile	Tyr Thr Leu Thr Cys Arg	
425	430	435
Phe Glu Gly Leu Leu Arg Pro Tyr Ile	Glu Tyr Pro Ser Tyr Asn	
440	445	450
Glu Gln Asn Gly Thr Pro Ile Val Ile	Cys Pro Val Thr Gln Glu	
455	460	465
Ser Glu Lys Glu Ala Ser Trp Gln Arg	Ala Ser Ala Ile Pro Glu	
470	475	480
Thr Ser Asn Ser Glu Ser Ser Ser Gln	Ala Thr Thr Pro Phe Leu	
485	490	495
Pro Arg Gly Glu Met		
500		

<210> 85
 <211> 1665
 <212> DNA
 <213> Homo Sapien

<400> 85
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 gtccatgtgc cctgctcctt ctccatcccc tcgcatggct ggatttacc 200
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 aggatgctcc agtggccaca aacaacccag ctccgggcagt gtgggaggag 300
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 cagaacttga ccatgactgt cttccaagga gacggcacag tatccacagt 800
 cttgggaaat ggctcatctc tgtcactccc agagggccag tctctgcgcc 850
 tggctgtgac agttgatgca gttgacagca atccccctgc caggctgagc 900
 ctgagctgga gaggcctgac cctgtgcccc tcacagccct caaaccggg 950

ggtgctggag ctgccttggg tgcacctgag ggatgcagct gaattcacct 1000
 gcagagctca gaaccctctc ggctctcagc aggtctacct gaacgtctcc 1050
 ctgcagagca aagccacatc aggagtgact cagggggtgg tcgggggagc 1100
 tggagccaca gccctgggtct tctgttcctt ctgcgtcatc ttcgtttag 1150
 tgaggctctg caggaagaaa tcggcaaggc cagcagcggg cgtgggagat 1200
 acgggcatag aggatgcaaa cgctgtcagg ggttcagcct ctcaggggcc 1250
 cctgactgaa ccttgggcag aagacagtcc cccagaccag cctccccag 1300
 cttctgcccc ctctcagtg ggggaaggag agctccagta tgcattccctc 1350
 agcttccaga tggatgaagc ttgggactcg cggggacagg aggccactga 1400
 caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450
 acctgattg agggatcaca gccctccag gcaagggaga agtcagaggc 1500
 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataacact 1550
 atgaattatg tgcagagtga aaagcacaca ggctttagag tcaaagtatc 1600
 tcaaacctga atccacactg tgccctccct tttatttttt taactaaaag 1650
 acagacaaat tccta 1665

<210> 86
 <211> 463
 <212> PRT
 <213> Homo Sapien

<400> 86
 Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Ala
 1 5 10 15
 Glu Gly Gln Thr Ser Lys Leu Leu Thr Met Gln Ser Ser Val Thr
 20 25 30
 Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser Phe Ser Tyr
 35 40 45
 Pro Ser His Gly Trp Ile Tyr Pro Gly Pro Val Val His Gly Tyr
 50 55 60
 Trp Phe Arg Glu Gly Ala Asn Thr Asp Gln Asp Ala Pro Val Ala
 65 70 75
 Thr Asn Asn Pro Ala Arg Ala Val Trp Glu Glu Thr Arg Asp Arg
 80 85 90
 Phe His Leu Leu Gly Asp Pro His Thr Lys Asn Cys Thr Leu Ser
 95 100 105
 Ile Arg Asp Ala Arg Arg Ser Asp Ala Gly Arg Tyr Phe Phe Arg
 110 115 120
 Met Glu Lys Gly Ser Ile Lys Trp Asn Tyr Lys His His Arg Leu
 125 130 135

Ser Val Asn Val	Thr Ala Leu Thr His	Arg Pro Asn Ile Leu Ile	140	145	150
Pro Gly Thr Leu	Glu Ser Gly Cys Pro	Gln Asn Leu Thr Cys Ser	155	160	165
Val Pro Trp Ala	Cys Glu Gln Gly Thr	Pro Pro Met Ile Ser Trp	170	175	180
Ile Gly Thr Ser	Val Ser Pro Leu Asp	Pro Ser Thr Thr Arg Ser	185	190	195
Ser Val Leu Thr	Leu Ile Pro Gln Pro	Gln Asp His Gly Thr Ser	200	205	210
Leu Thr Cys Gln	Val Thr Phe Pro Gly	Ala Ser Val Thr Thr Asn	215	220	225
Lys Thr Val His	Leu Asn Val Ser Tyr	Pro Pro Gln Asn Leu Thr	230	235	240
Met Thr Val Phe	Gln Gly Asp Gly Thr	Val Ser Thr Val Leu Gly	245	250	255
Asn Gly Ser Ser	Leu Ser Leu Pro Glu	Gly Gln Ser Leu Arg Leu	260	265	270
Val Cys Ala Val	Asp Ala Val Asp Ser	Asn Pro Pro Ala Arg Leu	275	280	285
Ser Leu Ser Trp	Arg Gly Leu Thr Leu	Cys Pro Ser Gln Pro Ser	290	295	300
Asn Pro Gly Val	Leu Glu Leu Pro Trp	Val His Leu Arg Asp Ala	305	310	315
Ala Glu Phe Thr	Cys Arg Ala Gln Asn	Pro Leu Gly Ser Gln Gln	320	325	330
Val Tyr Leu Asn	Val Ser Leu Gln Ser	Lys Ala Thr Ser Gly Val	335	340	345
Thr Gln Gly Val	Val Gly Gly Ala Gly	Ala Thr Ala Leu Val Phe	350	355	360
Leu Ser Phe Cys	Val Ile Phe Val Val	Val Arg Ser Cys Arg Lys	365	370	375
Lys Ser Ala Arg	Pro Ala Ala Gly Val	Gly Asp Thr Gly Ile Glu	380	385	390
Asp Ala Asn Ala	Val Arg Gly Ser Ala	Ser Gln Gly Pro Leu Thr	395	400	405
Glu Pro Trp Ala	Glu Asp Ser Pro Pro	Asp Gln Pro Pro Pro Ala	410	415	420
Ser Ala Arg Ser	Ser Val Gly Glu Gly	Glu Leu Gln Tyr Ala Ser	425	430	435
Leu Ser Phe Gln	Met Val Lys Pro Trp	Asp Ser Arg Gly Gln Glu	440	445	450

Ala Thr Asp Thr Glu Tyr Ser Glu Ile Lys Ile His Arg
 455 460

<210> 87
 <211> 1176
 <212> DNA
 <213> Homo Sapien

<400> 87
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 aggagctctc tgtaccaag gaaagtgcag ctgagactca gacaagatta 100
 caatgaacca actcagcttc ctgctgtttc tcatagcgac caccagagga 150
 tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
 gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250
 gtgcatttga tggcctgtat tttctccgca ctgagaatgg tggtatctac 300
 cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctgggtggc 350
 cagcgtgcat gagaatgaca tgcgtgggaa gtgcacgggtg ggcgatcgct 400
 ggtccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
 tgggccaaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500
 ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
 ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600
 ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
 gtttggcatc taccagaaat atccagtga atatggagaa ggaaagtgtt 700
 ggactgacaa cggcccggtg atccctgtgg tctatgattt tggcgacgcc 750
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 gggatttggt cagttcaggg tatttaataa cgagagagca gccaacgcct 850
 tgtgtgctgg aatgagggtc accggatgta aactgagca tcaactgcatt 900
 ggtggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950
 ttctggtttt gattggagtg gatatggaac tcatgttggt tacagcagca 1000
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctcctccca accatgagat cccaaggatg 1100
 gagaacaact taccagtag ctagaatgtt aatggcagaa gagaaaacaa 1150
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 88

Met	Asn	Gln	Leu	Ser	Phe	Leu	Leu	Phe	Leu	Ile	Ala	Thr	Thr	Arg	1	5	10	15
Gly	Trp	Ser	Thr	Asp	Glu	Ala	Asn	Thr	Tyr	Phe	Lys	Glu	Trp	Thr	20	25	30	
Cys	Ser	Ser	Ser	Pro	Ser	Leu	Pro	Arg	Ser	Cys	Lys	Glu	Ile	Lys	35	40	45	
Asp	Glu	Cys	Pro	Ser	Ala	Phe	Asp	Gly	Leu	Tyr	Phe	Leu	Arg	Thr	50	55	60	
Glu	Asn	Gly	Val	Ile	Tyr	Gln	Thr	Phe	Cys	Asp	Met	Thr	Ser	Gly	65	70	75	
Gly	Gly	Gly	Trp	Thr	Leu	Val	Ala	Ser	Val	His	Glu	Asn	Asp	Met	80	85	90	
Arg	Gly	Lys	Cys	Thr	Val	Gly	Asp	Arg	Trp	Ser	Ser	Gln	Gln	Gly	95	100	105	
Ser	Lys	Ala	Asp	Tyr	Pro	Glu	Gly	Asp	Gly	Asn	Trp	Ala	Asn	Tyr	110	115	120	
Asn	Thr	Phe	Gly	Ser	Ala	Glu	Ala	Ala	Thr	Ser	Asp	Asp	Tyr	Lys	125	130	135	
Asn	Pro	Gly	Tyr	Tyr	Asp	Ile	Gln	Ala	Lys	Asp	Leu	Gly	Ile	Trp	140	145	150	
His	Val	Pro	Asn	Lys	Ser	Pro	Met	Gln	His	Trp	Arg	Asn	Ser	Ser	155	160	165	
Leu	Leu	Arg	Tyr	Arg	Thr	Asp	Thr	Gly	Phe	Leu	Gln	Thr	Leu	Gly	170	175	180	
His	Asn	Leu	Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Gly	185	190	195	
Glu	Gly	Lys	Cys	Trp	Thr	Asp	Asn	Gly	Pro	Val	Ile	Pro	Val	Val	200	205	210	
Tyr	Asp	Phe	Gly	Asp	Ala	Gln	Lys	Thr	Ala	Ser	Tyr	Tyr	Ser	Pro	215	220	225	
Tyr	Gly	Gln	Arg	Glu	Phe	Thr	Ala	Gly	Phe	Val	Gln	Phe	Arg	Val	230	235	240	
Phe	Asn	Asn	Glu	Arg	Ala	Ala	Asn	Ala	Leu	Cys	Ala	Gly	Met	Arg	245	250	255	
Val	Thr	Gly	Cys	Asn	Thr	Glu	His	His	Cys	Ile	Gly	Gly	Gly	Gly	260	265	270	
Tyr	Phe	Pro	Glu	Ala	Ser	Pro	Gln	Gln	Cys	Gly	Asp	Phe	Ser	Gly	275	280	285	
Phe	Asp	Trp	Ser	Gly	Tyr	Gly	Thr	His	Val	Gly	Tyr	Ser	Ser	Ser	290	295	300	
Arg	Glu	Ile	Thr	Glu	Ala	Ala	Val	Leu	Leu	Phe	Tyr	Arg	305	310				

<210> 89
 <211> 759
 <212> DNA
 <213> Homo Sapien

<400> 89
 ctagatttgt cggcttgccg ggagacttca ggagtcgctg tctctgaact 50
 tccagcctca gagaccgccg cccttggtccc cgagggccat gggccgggtc 100
 tcagggcttg tgccctctcg ctctctgacg ctcttgccgc atctgggtgg 150
 cgtcatcacc ttattctggg cccgggacag caacatacag gcctgcctgc 200
 ctctcactgt ccccccgag gagtatgaca agcaggacat tcagctgggtg 250
 gccgcgctct ctgtcaccct gggcctcttt gcagtggagc tggccgggtt 300
 cctctcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350
 gggctcactg tagtgcaccc gtggccctgt ccttcttcat attcgagcgt 400
 tgggagtgca ctacgtattg gtacattttt gtctcttgca gtgcccttcc 450
 agctgtcact gaaatggctt tattcgtcac cgtctttggg ctgaaaaaga 500
 aacccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550
 ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcgggt 600
 ttccccctcg aaactgcttc tgctggagga tatgtgttgg aataattacg 650
 tcttgagtct gggattatcc gcattgtatt tagtgctttg taataaaata 700
 tgtttttag tagtaacattaag acttatatac agtttttaggg gacaattaa 750
 aaaaaaaaaa 759

<210> 90
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 90
 Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu
 1 5 10 15
 Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
 20 25 30
 Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
 35 40 45
 Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
 50 55 60
 Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
 65 70 75
 Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
 80 85 90
 Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp

	95		100		105
Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu					
	110		115		120
Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu					
	125		130		135
Lys Lys Lys Pro Phe					
	140				

<210> 91
 <211> 1871
 <212> DNA
 <213> Homo Sapien

<400> 91
 ctgggacccc gaaaagagaa ggggagagcg aggggacgag agcggaggag 50
 gaagatgcaa ctgactcgct gctgcttcgt gttcctggtg cagggtagcc 100
 tctatctggt catctgtggc caggatgatg gtcctcccgg ctgagaggac 150
 cctgagcgtg atgaccacga gggccagccc cggccccggg tgcctcggaa 200
 gcggggccac atctcaccta agtcccgccc catggccaat tccactctcc 250
 tagggctgct ggccccgcct ggggaggcctt ggggcattct tgggcagccc 300
 cccaaccgcc cgaaccacag cccccaccc tcagccaagg tgaagaaaat 350
 ctttggtctg ggcgacttct actccaacat caagacggtg gccctgaacc 400
 tgctcgtcac aggggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
 cacttccaac acaatgccac aggccaggga aacatctcca tcagcctcgt 500
 gccccccagt aaagctgtag agttccacca ggaacagcag atcttcatcg 550
 aagccaaggc ctccaaaatc ttcaactgcc ggatggagtg ggagaaggta 600
 gaacggggcc gccggacctc gctttgcacc cacgaccag ccaagatctg 650
 ctcccgagac cacgctcaga gctcagccac ctggagctgc tcccagccct 700
 tcaaagtcgt ctgtgtctac atcgcttct acagcacgga ctatcggctg 750
 gtccagaagg tgtgcccaga ttacaactac catagtata cccctacta 800
 cccatctggg tgaccggggg caggccacag agggcaggcc agggctggaa 850
 ggacaggcct gcccatgcag gagaccatct ggacaccggg cagggaaggg 900
 gttgggcctc aggcaggag gggggtggag acgaggagat gccaaagtggg 950
 gccagggcca agtctcaagt ggcagagaaa ggggtcccaag tgctgggtccc 1000
 aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagtg 1050
 ggctctctgt gcagcctcac agggctttgc cacggagcca cagagagatg 1100
 ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc cccagatcaa 1150

gtcacgggag gaagctaagc ccttggttct tgccatcctg aggaaagata 1200
 gcaacagggga gggggagatt tcatcagtggt ggacagcctg tcaacttagg 1250
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 gccagaggag ctctccagcc ctgcctagtgt ggcgccctga gccccttgct 1350
 gtgtgctgag catggcatga ggctgaagtgt gcaaccctgg ggtctttgat 1400
 gtcttgacag attgaccatc tgtctccagc caggccaccc ctttccaaaa 1450
 ttccctcttc tgccagtact cccctgtac caccattgc tgatggcaca 1500
 cccatcctta agctaagaca ggacgattgt ggtcctcca cactaaggcc 1550
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 ctccctctggg agcatccatg tcccgagag gggccctca acagtcagcc 1650
 tcacctgtca gaccgggggtt ctcccgatc tggatggcgc cgcctctca 1700
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 aaccgctgat tgctgacttt tgtgtgaaga atcgtgttct tggagcagga 1850
 aataaagctt gccccggggc a 1871

<210> 92
 <211> 252
 <212> PRT
 <213> Homo Sapien

<400> 92
 Met Gln Leu Thr Arg Cys Cys Phe Val Phe Leu Val Gln Gly Ser
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 Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
 20 25 30
 Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
 35 40 45
 Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
 50 55 60
 Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
 65 70 75
 Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
 80 85 90
 Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
 95 100 105
 Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
 110 115 120
 Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
 125 130 135

His	Asn	Ala	Thr	Gly	Gln	Gly	Asn	Ile	Ser	Ile	Ser	Leu	Val	Pro
				140					145					150
Pro	Ser	Lys	Ala	Val	Glu	Phe	His	Gln	Glu	Gln	Gln	Ile	Phe	Ile
				155					160					165
Glu	Ala	Lys	Ala	Ser	Lys	Ile	Phe	Asn	Cys	Arg	Met	Glu	Trp	Glu
				170					175					180
Lys	Val	Glu	Arg	Gly	Arg	Arg	Thr	Ser	Leu	Cys	Thr	His	Asp	Pro
				185					190					195
Ala	Lys	Ile	Cys	Ser	Arg	Asp	His	Ala	Gln	Ser	Ser	Ala	Thr	Trp
				200					205					210
Ser	Cys	Ser	Gln	Pro	Phe	Lys	Val	Val	Cys	Val	Tyr	Ile	Ala	Phe
				215					220					225
Tyr	Ser	Thr	Asp	Tyr	Arg	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp	Tyr
				230					235					240
Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Tyr	Pro	Ser	Gly			
				245					250					

<210> 93
 <211> 902
 <212> DNA
 <213> Homo Sapien

<400> 93
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 gggcctgcgc tcgcccttta tgtcttcacc atcgccatcg agccgttgcg 100
 tatcatcttc ctcatcgccg gagctttctt ctgggttggtg tctctactga 150
 ttctgctcct tgtttggttc atggcaagag tcattattga caacaaagat 200
 ggaccaacac agaaatatct gctgatcttt ggagcgtttg tctctgtcta 250
 tatccaagaa atgttccgat ttgcatatta taaactctta aaaaaagcca 300
 gtgaagggtt gaagagtata aaccaggtg agacagcacc ctctatgcga 350
 ctgctggcct atgtttctgg cttgggcttt ggaatcatga gtggagtatt 400
 ttcctttgtg aataccctat ctgactcctt ggggccaggc acagtgggca 450
 ttcattggaga ttctcctcaa ttcttccttt attcagcttt catgacgctg 500
 gtcattatct tgctgcatgt attctggggc attgtatttt ttgatggctg 550
 tgagaagaaa aagtggggca tctccttat cgttctctctg acccacctgc 600
 tgggtgtcagc ccagaccttc ataagttctt attatggaat aaacctggcg 650
 tcagcattta taatcctggt gctcatgggc acctgggcat tcttagctgc 700
 gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750
 actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800
 tcccaaaccg cagactacat ctttagagga agcacaactg tgcctttttc 850

tgaaaatccc tttttctggt ggaattgaga aagaaataaa actatgcaga 900

ta 902

<210> 94

<211> 257

<212> PRT

<213> Homo Sapien

<400> 94

Met	Thr	Ala	Ala	Val	Phe	Phe	Gly	Cys	Ala	Phe	Ile	Ala	Phe	Gly	
1				5					10					15	
Pro	Ala	Leu	Ala	Leu	Tyr	Val	Phe	Thr	Ile	Ala	Ile	Glu	Pro	Leu	
				20					25					30	
Arg	Ile	Ile	Phe	Leu	Ile	Ala	Gly	Ala	Phe	Phe	Trp	Leu	Val	Ser	
				35					40					45	
Leu	Leu	Ile	Ser	Ser	Leu	Val	Trp	Phe	Met	Ala	Arg	Val	Ile	Ile	
				50					55					60	
Asp	Asn	Lys	Asp	Gly	Pro	Thr	Gln	Lys	Tyr	Leu	Leu	Ile	Phe	Gly	
				65					70					75	
Ala	Phe	Val	Ser	Val	Tyr	Ile	Gln	Glu	Met	Phe	Arg	Phe	Ala	Tyr	
				80					85					90	
Tyr	Lys	Leu	Leu	Lys	Lys	Ala	Ser	Glu	Gly	Leu	Lys	Ser	Ile	Asn	
				95					100					105	
Pro	Gly	Glu	Thr	Ala	Pro	Ser	Met	Arg	Leu	Leu	Ala	Tyr	Val	Ser	
				110					115					120	
Gly	Leu	Gly	Phe	Gly	Ile	Met	Ser	Gly	Val	Phe	Ser	Phe	Val	Asn	
				125					130					135	
Thr	Leu	Ser	Asp	Ser	Leu	Gly	Pro	Gly	Thr	Val	Gly	Ile	His	Gly	
				140					145					150	
Asp	Ser	Pro	Gln	Phe	Phe	Leu	Tyr	Ser	Ala	Phe	Met	Thr	Leu	Val	
				155					160					165	
Ile	Ile	Leu	Leu	His	Val	Phe	Trp	Gly	Ile	Val	Phe	Phe	Asp	Gly	
				170					175					180	
Cys	Glu	Lys	Lys	Lys	Trp	Gly	Ile	Leu	Leu	Ile	Val	Leu	Leu	Thr	
				185					190					195	
His	Leu	Leu	Val	Ser	Ala	Gln	Thr	Phe	Ile	Ser	Ser	Tyr	Tyr	Gly	
				200					205					210	
Ile	Asn	Leu	Ala	Ser	Ala	Phe	Ile	Ile	Leu	Val	Leu	Met	Gly	Thr	
				215					220					225	
Trp	Ala	Phe	Leu	Ala	Ala	Gly	Gly	Ser	Cys	Arg	Ser	Leu	Lys	Leu	
				230					235					240	
Cys	Leu	Leu	Cys	Gln	Asp	Lys	Asn	Phe	Leu	Leu	Tyr	Asn	Gln	Arg	
				245					250					255	

Ser Arg

<210> 95
 <211> 1073
 <212> DNA
 <213> Homo Sapien

<400> 95
 aattttttcac cagagtaaacc ttgagaaacc aactggacct tgagtattgt 50
 acatttttgcc tcgtggaccc aaaggtagca atctgaaaca tgaggagtac 100
 gattctactg ttttgtcttc taggatcaac tcggtcatta ccacagctca 150
 aacctgcttt gggactccct cccacaaaac tggctccgga tcagggaaca 200
 ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250
 accattaaca cagatgctca cactggggcc agatctgcat ctgttaaatac 300
 ctgctgcagg aatgacacct ggtaccaga cccaccatt gaccctggga 350
 ggggttgatg tacaacagca actgcacca catgtgttac caatttttgt 400
 cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450
 aaatcttcac gagcctcatc atccattcct tgttccggg aggcattctg 500
 cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttcc 550
 agcaggagga gcaggtgtaa atcctgccac ccagggaacc ccagcaggcc 600
 gcctcccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650
 gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaatc 700
 agcaaattgga attcagtaag ctgtttcaaa ttttttcaac taagctgcct 750
 cgaatttggt gatacatgtg aatctttatc attgattata ttatggaata 800
 gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850
 gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaatcccaa 900
 ctttttaaaa caataattca atggataaat ctgtctttga aatataacat 950
 tatgctgcct ggatgatatg catattaaaa catatttgga aaactggaaa 1000
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
 aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96
 <211> 209
 <212> PRT
 <213> Homo Sapien

<400> 96
 Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
 1 5 10 15
 Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
 20 25 30
 Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn

35										40					45				
Gln	Val	Phe	Pro	Ser	Leu	Ser	Leu	Ile	Pro	Leu	Thr	Gln	Met	Leu					
				50					55					60					
Thr	Leu	Gly	Pro	Asp	Leu	His	Leu	Leu	Asn	Pro	Ala	Ala	Gly	Met					
				65					70					75					
Thr	Pro	Gly	Thr	Gln	Thr	His	Pro	Leu	Thr	Leu	Gly	Gly	Leu	Asn					
				80					85					90					
Val	Gln	Gln	Gln	Leu	His	Pro	His	Val	Leu	Pro	Ile	Phe	Val	Thr					
				95					100					105					
Gln	Leu	Gly	Ala	Gln	Gly	Thr	Ile	Leu	Ser	Ser	Glu	Glu	Leu	Pro					
				110					115					120					
Gln	Ile	Phe	Thr	Ser	Leu	Ile	Ile	His	Ser	Leu	Phe	Pro	Gly	Gly					
				125					130					135					
Ile	Leu	Pro	Thr	Ser	Gln	Ala	Gly	Ala	Asn	Pro	Asp	Val	Gln	Asp					
				140					145					150					
Gly	Ser	Leu	Pro	Ala	Gly	Gly	Ala	Gly	Val	Asn	Pro	Ala	Thr	Gln					
				155					160					165					
Gly	Thr	Pro	Ala	Gly	Arg	Leu	Pro	Thr	Pro	Ser	Gly	Thr	Asp	Asp					
				170					175					180					
Asp	Phe	Ala	Val	Thr	Thr	Pro	Ala	Gly	Ile	Gln	Arg	Ser	Thr	His					
				185					190					195					
Ala	Ile	Glu	Glu	Ala	Thr	Thr	Glu	Ser	Ala	Asn	Gly	Ile	Gln						
				200					205										

<210> 97
 <211> 2848
 <212> DNA
 <213> Homo Sapien

<400> 97
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 ttgggcgctg gagggcctgt cctgaccatg gtccctgcct ggctgtggct 150
 gctttgtgtc tccgtccccc aggtctctcc caaggcccag cctgcagagc 200
 tgtctgtgga agttccagaa aactatggtg gaaatttccc tttataacctg 250
 accaagttgc cgtgccccg tgagggggct gaaggccaga tcgtgctgtc 300
 aggggactca ggcaaggcaa ctgagggccc atttgctatg gatccagatt 350
 ctggcttctc gctggtgacc agggccctgg accgagagga gcaggcagag 400
 taccagctac aggtcaccct ggagatgcag gatggacatg tcttgtgggg 450
 tccacagcct gtgcttgtgc acgtgaagga tgagaatgac caggtgcccc 500
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 cagaggggtg cttcagcagc acgtgtgaag tcgaagtcgc agtcacagat 1450
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 ctgggcccta tgggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 2848

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 <211> 807
 <212> PRT
 <213> Homo Sapien

<400> 98
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 Glu Asn Tyr Gly Gly Asn Phe Pro Leu Tyr Leu Thr Lys Leu Pro
 35 40 45
 Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
 50 55 60
 Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
 65 70 75
 Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala
 80 85 90
 Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val
 95 100 105
 Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn
 110 115 120
 Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu
 125 130 135
 Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala
 140 145 150

Ser	Asp	Arg	Asp	Glu	Pro	Gly	Thr	Ala	Asn	Ser	Asp	Leu	Arg	Phe
				155					160					165
His	Ile	Leu	Ser	Gln	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Asp	Met	Phe
				170					175					180
Gln	Leu	Glu	Pro	Arg	Leu	Gly	Ala	Leu	Ala	Leu	Ser	Pro	Lys	Gly
				185					190					195
Ser	Thr	Ser	Leu	Asp	His	Ala	Leu	Glu	Arg	Thr	Tyr	Gln	Leu	Leu
				200					205					210
Val	Gln	Val	Lys	Asp	Met	Gly	Asp	Gln	Ala	Ser	Gly	His	Gln	Ala
				215					220					225
Thr	Ala	Thr	Val	Glu	Val	Ser	Ile	Ile	Glu	Ser	Thr	Trp	Val	Ser
				230					235					240
Leu	Glu	Pro	Ile	His	Leu	Ala	Glu	Asn	Leu	Lys	Val	Leu	Tyr	Pro
				245					250					255
His	His	Met	Ala	Gln	Val	His	Trp	Ser	Gly	Gly	Asp	Val	His	Tyr
				260					265					270
His	Leu	Glu	Ser	His	Pro	Pro	Gly	Pro	Phe	Glu	Val	Asn	Ala	Glu
				275					280					285
Gly	Asn	Leu	Tyr	Val	Thr	Arg	Glu	Leu	Asp	Arg	Glu	Ala	Gln	Ala
				290					295					300
Glu	Tyr	Leu	Leu	Gln	Val	Arg	Ala	Gln	Asn	Ser	His	Gly	Glu	Asp
				305					310					315
Tyr	Ala	Ala	Pro	Leu	Glu	Leu	His	Val	Leu	Val	Met	Asp	Glu	Asn
				320					325					330
Asp	Asn	Val	Pro	Ile	Cys	Pro	Pro	Arg	Asp	Pro	Thr	Val	Ser	Ile
				335					340					345
Pro	Glu	Leu	Ser	Pro	Pro	Gly	Thr	Glu	Val	Thr	Arg	Leu	Ser	Ala
				350					355					360
Glu	Asp	Ala	Asp	Ala	Pro	Gly	Ser	Pro	Asn	Ser	His	Val	Val	Tyr
				365					370					375
Gln	Leu	Leu	Ser	Pro	Glu	Pro	Glu	Asp	Gly	Val	Glu	Gly	Arg	Ala
				380					385					390
Phe	Gln	Val	Asp	Pro	Thr	Ser	Gly	Ser	Val	Thr	Leu	Gly	Val	Leu
				395					400					405
Pro	Leu	Arg	Ala	Gly	Gln	Asn	Ile	Leu	Leu	Leu	Val	Leu	Ala	Met
				410					415					420
Asp	Leu	Ala	Gly	Ala	Glu	Gly	Gly	Phe	Ser	Ser	Thr	Cys	Glu	Val
				425					430					435
Glu	Val	Ala	Val	Thr	Asp	Ile	Asn	Asp	His	Ala	Pro	Glu	Phe	Ile
				440					445					450
Thr	Ser	Gln	Ile	Gly	Pro	Ile	Ser	Leu	Pro	Glu	Asp	Val	Glu	Pro
				455					460					465

Gly Thr Leu Val	Ala Met Leu Thr Ala	Ile Asp Ala Asp Leu Glu	470	475	480
Pro Ala Phe Arg	Leu Met Asp Phe Ala	Ile Glu Arg Gly Asp Thr	485	490	495
Glu Gly Thr Phe	Gly Leu Asp Trp Glu	Pro Asp Ser Gly His Val	500	505	510
Arg Leu Arg Leu	Cys Lys Asn Leu Ser	Tyr Glu Ala Ala Pro Ser	515	520	525
His Glu Val Val	Val Val Val Gln Ser	Val Ala Lys Leu Val Gly	530	535	540
Pro Gly Pro Gly	Pro Gly Ala Thr Ala	Thr Val Thr Val Leu Val	545	550	555
Glu Arg Val Met	Pro Pro Pro Lys Leu	Asp Gln Glu Ser Tyr Glu	560	565	570
Ala Ser Val Pro	Ile Ser Ala Pro Ala	Gly Ser Phe Leu Leu Thr	575	580	585
Ile Gln Pro Ser	Asp Pro Ile Ser Arg	Thr Leu Arg Phe Ser Leu	590	595	600
Val Asn Asp Ser	Glu Gly Trp Leu Cys	Ile Glu Lys Phe Ser Gly	605	610	615
Glu Val His Thr	Ala Gln Ser Leu Gln	Gly Ala Gln Pro Gly Asp	620	625	630
Thr Tyr Thr Val	Leu Val Glu Ala Gln	Asp Thr Ala Leu Thr Leu	635	640	645
Ala Pro Val Pro	Ser Gln Tyr Leu Cys	Thr Pro Arg Gln Asp His	650	655	660
Gly Leu Ile Val	Ser Gly Pro Ser Lys	Asp Pro Asp Leu Ala Ser	665	670	675
Gly His Gly Pro	Tyr Ser Phe Thr Leu	Gly Pro Asn Pro Thr Val	680	685	690
Gln Arg Asp Trp	Arg Leu Gln Thr Leu	Asn Gly Ser His Ala Tyr	695	700	705
Leu Thr Leu Ala	Leu His Trp Val Glu	Pro Arg Glu His Ile Ile	710	715	720
Pro Val Val Val	Ser His Asn Ala Gln	Met Trp Gln Leu Leu Val	725	730	735
Arg Val Ile Val	Cys Arg Cys Asn Val	Glu Gly Gln Cys Met Arg	740	745	750
Lys Val Gly Arg	Met Lys Gly Met Pro	Thr Lys Leu Ser Ala Val	755	760	765
Gly Ile Leu Val	Gly Thr Leu Val Ala	Ile Gly Ile Phe Leu Ile	770	775	780

Leu Ile Phe Thr His Trp Thr Met Ser Arg Lys Lys Asp Pro Asp
785 790 795

Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val
800 805

<210> 99
<211> 2436
<212> DNA
<213> Homo Sapien

<400> 99
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ctttctcaag aatcctctgt tctttgccct ctaaagtctt ggtacatcta 200
ggacccaggc atcttgcttt ccagccacaa agagacagat gaagatgcag 250
aaaggaaatg ttctccttat gtttgggtcta ctattgcatt tagaagctgc 300
aacaaattcc aatgagacta gcacctctgc caaacttgga tccagtgtga 350
tctccagtgg agccagcaca gccaccaact ctgggtccag tgtgacctcc 400
agtgggggtca gcacagccac catctcaggg tccagcgtga cctccaatgg 450
ggtcagcata gtcaccaact ctgagttcca tacaacctcc agtgggatca 500
gcacagccac caactctgag ttcagcacag cgtccagtgg gatcagcata 550
gccaccaact ctgagtccag cacaacctcc agtggggcca gcacagccac 600
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tgtccagtgg gatcagcaca gtcaccaatt ctgagtccag cacacctcc 1300

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 gatgaactca gttataggag aaaacctcca tgctggactc catctggcat 2350
 tcaaaatctc cacagtaaaa tccaaagacc tcaaaaaaaaa aaaaaaaaaa 2400
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2436

<210> 100
 <211> 596
 <212> PRT
 <213> Homo Sapien

<400> 100
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 Ala Asn Thr Gly Ser Ser Val Ile Ser Ser Gly Ala Ser Thr Ala
 35 40 45
 Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Val Ser Thr Ala
 50 55 60

Thr	Ile	Ser	Gly	Ser	Ser	Val	Thr	Ser	Asn	Gly	Val	Ser	Ile	Val	65	70	75
Thr	Asn	Ser	Glu	Phe	His	Thr	Thr	Ser	Ser	Gly	Ile	Ser	Thr	Ala	80	85	90
Thr	Asn	Ser	Glu	Phe	Ser	Thr	Ala	Ser	Ser	Gly	Ile	Ser	Ile	Ala	95	100	105
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	110	115	120
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Ser	Thr	Val	125	130	135
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	140	145	150
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala	155	160	165
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Leu	Ser	Ser	Gly	Ala	Ser	Thr	Ala	170	175	180
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	185	190	195
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	200	205	210
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala	215	220	225
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	230	235	240
Thr	Asn	Ser	Glu	Ser	Arg	Thr	Thr	Ser	Asn	Gly	Ala	Gly	Thr	Ala	245	250	255
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	260	265	270
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala	275	280	285
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	290	295	300
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	305	310	315
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Gly	Thr	Ala	320	325	330
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ile	Ser	Thr	Val	335	340	345
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Asn	Thr	Ala	350	355	360
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Asn	Thr	Ala	365	370	375

Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala	380	385	390
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Val	Ser	Thr	Ala	395	400	405
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	410	415	420
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Glu	Ala	Ser	Thr	Ala	425	430	435
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ile	Ser	Thr	Val	440	445	450
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Asn	Thr	Ala	455	460	465
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ala	Gly	Ser	Gly	Thr	Ala	470	475	480
Ala	Leu	Thr	Gly	Met	His	Thr	Thr	Ser	His	Ser	Ala	Ser	Thr	Ala	485	490	495
Val	Ser	Glu	Ala	Lys	Pro	Gly	Gly	Ser	Leu	Val	Pro	Trp	Glu	Ile	500	505	510
Phe	Leu	Ile	Thr	Leu	Val	Ser	Val	Val	Ala	Ala	Val	Gly	Leu	Phe	515	520	525
Ala	Gly	Leu	Phe	Phe	Cys	Val	Arg	Asn	Ser	Leu	Ser	Leu	Arg	Asn	530	535	540
Thr	Phe	Asn	Thr	Ala	Val	Tyr	His	Pro	His	Gly	Leu	Asn	His	Gly	545	550	555
Leu	Gly	Pro	Gly	Pro	Gly	Gly	Asn	His	Gly	Ala	Pro	His	Arg	Pro	560	565	570
Arg	Trp	Ser	Pro	Asn	Trp	Phe	Trp	Arg	Arg	Pro	Val	Ser	Ser	Ile	575	580	585
Ala	Met	Glu	Met	Ser	Gly	Arg	Asn	Ser	Gly	Pro					590	595	

<210> 101
 <211> 1728
 <212> DNA
 <213> Homo Sapien

<400> 101
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 tgaaaaacag agtgggtact ctcttctggg aagctggcaa caaatggatg 200
 atgtgatata tgcattccag gggaaggga attgtggtgc ttctgaaccc 250
 atggtcaatt aacgaggcag tttctagcta ctgcacgtac ttcataaagc 300

aggactctaa aagcttttga atcatggtgt catggaaagg gatttacttt 350
 atactgactc tgttttgggg aagctttttt ggaagcattt tcatgctgag 400
 tcccttttta cctttgatgt ttgtaaaccc atcttggtat cgctggatca 450
 acaaccgcct tgtggcaaca tggctcacc cactgtggc attattggag 500
 accatgtttg gtgtaaaagt gattataact ggggatgcat ttgttcctgg 550
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 tctgttgga ttgcctgatg cgatatagct acctcagatt ggagaaaatt 650
 tgcctcaaag cgagtctcaa aggtgttctt ggatttggtt gggccatgca 700
 ggctgctgcc tatatcttca ttcataggaa atggaaggat gacaagagcc 750
 atttogaaga catgattgat tacttttgtg atattcacga accacttcaa 800
 ctctcatat tcccagaagg gactgatctc acagaaaaca gcaagtctcg 850
 aagtaatgca tttgctgaaa aaaatggact tcagaaatat gaatatgttt 900
 tacatccaag aactacaggc tttacttttg tggtagaccg tctaagagaa 950
 ggtaagaacc ttgatgctgt ccatgatatc actgtggcgt atcctcacia 1000
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 gctgcgttcc ttctatcaag gggagaagaa tttttatttt accggacaga 1200
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 atatttgtac agtcttggtt agtgggtattt tataatcacc attgtaatct 1350
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<210> 102
 <211> 414
 <212> PRT
 <213> Homo Sapien

<400> 102

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Ser	Ile	Asn	Glu	Ala	Val	Ser	Ser	Tyr	Cys	Thr	Tyr	Phe	Ile	Lys	20	25	30	
Gln	Asp	Ser	Lys	Ser	Phe	Gly	Ile	Met	Val	Ser	Trp	Lys	Gly	Ile	35	40	45	
Tyr	Phe	Ile	Leu	Thr	Leu	Phe	Trp	Gly	Ser	Phe	Phe	Gly	Ser	Ile	50	55	60	
Phe	Met	Leu	Ser	Pro	Phe	Leu	Pro	Leu	Met	Phe	Val	Asn	Pro	Ser	65	70	75	
Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr	80	85	90	
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile	95	100	105	
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile	110	115	120	
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys	125	130	135	
Leu	Met	Arg	Tyr	Ser	Tyr	Leu	Arg	Leu	Glu	Lys	Ile	Cys	Leu	Lys	140	145	150	
Ala	Ser	Leu	Lys	Gly	Val	Pro	Gly	Phe	Gly	Trp	Ala	Met	Gln	Ala	155	160	165	
Ala	Ala	Tyr	Ile	Phe	Ile	His	Arg	Lys	Trp	Lys	Asp	Asp	Lys	Ser	170	175	180	
His	Phe	Glu	Asp	Met	Ile	Asp	Tyr	Phe	Cys	Asp	Ile	His	Glu	Pro	185	190	195	
Leu	Gln	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Asp	Leu	Thr	Glu	Asn	200	205	210	
Ser	Lys	Ser	Arg	Ser	Asn	Ala	Phe	Ala	Glu	Lys	Asn	Gly	Leu	Gln	215	220	225	
Lys	Tyr	Glu	Tyr	Val	Leu	His	Pro	Arg	Thr	Thr	Gly	Phe	Thr	Phe	230	235	240	
Val	Val	Asp	Arg	Leu	Arg	Glu	Gly	Lys	Asn	Leu	Asp	Ala	Val	His	245	250	255	
Asp	Ile	Thr	Val	Ala	Tyr	Pro	His	Asn	Ile	Pro	Gln	Ser	Glu	Lys	260	265	270	
His	Leu	Leu	Gln	Gly	Asp	Phe	Pro	Arg	Glu	Ile	His	Phe	His	Val	275	280	285	
His	Arg	Tyr	Pro	Ile	Asp	Thr	Leu	Pro	Thr	Ser	Lys	Glu	Asp	Leu	290	295	300	
Gln	Leu	Trp	Cys	His	Lys	Arg	Trp	Glu	Glu	Lys	Glu	Glu	Arg	Leu	305	310	315	

Arg	Ser	Phe	Tyr	Gln	Gly	Glu	Lys	Asn	Phe	Tyr	Phe	Thr	Gly	Gln
				320					325					330
Ser	Val	Ile	Pro	Pro	Cys	Lys	Ser	Glu	Leu	Arg	Val	Leu	Val	Val
				335					340					345
Lys	Leu	Leu	Ser	Ile	Leu	Tyr	Trp	Thr	Leu	Phe	Ser	Pro	Ala	Met
				350					355					360
Cys	Leu	Leu	Ile	Tyr	Leu	Tyr	Ser	Leu	Val	Lys	Trp	Tyr	Phe	Ile
				365					370					375
Ile	Thr	Ile	Val	Ile	Phe	Val	Leu	Gln	Glu	Arg	Ile	Phe	Gly	Gly
				380					385					390
Leu	Glu	Ile	Ile	Glu	Leu	Ala	Cys	Tyr	Arg	Leu	Leu	His	Lys	Gln
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Pro	His	Leu	Asn	Ser	Lys	Lys	Asn	Glu						
				410										

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 <211> 2403
 <212> DNA
 <213> Homo Sapien

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<210> 104

<211> 466
 <212> PRT
 <213> Homo Sapien

<400> 104

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Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu	35	40	45	
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe	50	55	60	
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser	65	70	75	
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp	80	85	90	
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr	95	100	105	
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile	110	115	120	
Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly	125	130	135	
Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile	140	145	150	
Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala	155	160	165	
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg	170	175	180	
Ala	Asn	Ala	Asp	Gly	Tyr	Ser	Leu	Tyr	Asp	Val	Glu	Ile	Ser	Ile	185	190	195	
Ile	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Leu	Cys	Ser	Ile	His	Leu	200	205	210	
Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu	215	220	225	
Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu	230	235	240	
Gly	Leu	Leu	Cys	Gly	Ala	Leu	Cys	Gly	Val	Val	Met	Gly	Met	Ile	245	250	255	
Ile	Val	Phe	Phe	Lys	Ser	Lys	Gly	Lys	Ile	Gln	Ala	Glu	Leu	Asp	260	265	270	
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys	275	280	285	
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys				

290										295					300				
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro					
				305					310					315					
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val					
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Val	Ala	Ser	Gln	Gly	Phe	Gln	Ala	Gly	Arg	His	Tyr	Trp	Glu	Val					
				335					340					345					
Asp	Val	Gly	Gln	Asn	Val	Gly	Trp	Tyr	Val	Gly	Val	Cys	Arg	Asp					
				350					355					360					
Asp	Val	Asp	Arg	Gly	Lys	Asn	Asn	Val	Thr	Leu	Ser	Pro	Asn	Asn					
				365					370					375					
Gly	Tyr	Trp	Val	Leu	Arg	Leu	Thr	Thr	Glu	His	Leu	Tyr	Phe	Thr					
				380					385					390					
Phe	Asn	Pro	His	Phe	Ile	Ser	Leu	Pro	Pro	Ser	Thr	Pro	Pro	Thr					
				395					400					405					
Arg	Val	Gly	Val	Phe	Leu	Asp	Tyr	Glu	Gly	Gly	Thr	Ile	Ser	Phe					
				410					415					420					
Phe	Asn	Thr	Asn	Asp	Gln	Ser	Leu	Ile	Tyr	Thr	Leu	Leu	Thr	Cys					
				425					430					435					
Gln	Phe	Glu	Gly	Leu	Leu	Arg	Pro	Tyr	Ile	Gln	His	Ala	Met	Tyr					
				440					445					450					
Asp	Glu	Glu	Lys	Gly	Thr	Pro	Ile	Phe	Ile	Cys	Pro	Val	Ser	Trp					
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<210> 105
 <211> 2103
 <212> DNA
 <213> Homo Sapien

<400> 105
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cca 2103

<210> 106

<211> 423

<212> PRT

<213> Homo Sapien

<400> 106

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				20					25					30
Val	Leu	Ala	Val	Cys	Ile	Gly	Leu	Thr	Val	His	Tyr	Val	Arg	Tyr
				35					40					45
Asn	Gln	Lys	Lys	Thr	Tyr	Asn	Tyr	Tyr	Ser	Thr	Leu	Ser	Phe	Thr
				50					55					60
Thr	Asp	Lys	Leu	Tyr	Ala	Glu	Phe	Gly	Arg	Glu	Ala	Ser	Asn	Asn
				65					70					75
Phe	Thr	Glu	Met	Ser	Gln	Arg	Leu	Glu	Ser	Met	Val	Lys	Asn	Ala
				80					85					90
Phe	Tyr	Lys	Ser	Pro	Leu	Arg	Glu	Glu	Phe	Val	Lys	Ser	Gln	Val
				95					100					105
Ile	Lys	Phe	Ser	Gln	Gln	Lys	His	Gly	Val	Leu	Ala	His	Met	Leu
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Leu	Ile	Cys	Arg	Phe	His	Ser	Thr	Glu	Asp	Pro	Glu	Thr	Val	Asp
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Lys	Ile	Val	Gln	Leu	Val	Leu	His	Glu	Lys	Leu	Gln	Asp	Ala	Val
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Gly	Pro	Pro	Lys	Val	Asp	Pro	His	Ser	Val	Lys	Ile	Lys	Lys	Ile
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Asn	Lys	Thr	Glu	Thr	Asp	Ser	Tyr	Leu	Asn	His	Cys	Cys	Gly	Thr
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Arg	Arg	Ser	Lys	Thr	Leu	Gly	Gln	Ser	Leu	Arg	Ile	Val	Gly	Gly
				185					190					195
Thr	Glu	Val	Glu	Glu	Gly	Glu	Trp	Pro	Trp	Gln	Ala	Ser	Leu	Gln
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Trp	Asp	Gly	Ser	His	Arg	Cys	Gly	Ala	Thr	Leu	Ile	Asn	Ala	Thr
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Trp	Leu	Val	Ser	Ala	Ala	His	Cys	Phe	Thr	Thr	Tyr	Lys	Asn	Pro
				230					235					240
Ala	Arg	Trp	Thr	Ala	Ser	Phe	Gly	Val	Thr	Ile	Lys	Pro	Ser	Lys
				245					250					255
Met	Lys	Arg	Gly	Leu	Arg	Arg	Ile	Ile	Val	His	Glu	Lys	Tyr	Lys
				260					265					270
His	Pro	Ser	His	Asp	Tyr	Asp	Ile	Ser	Leu	Ala	Glu	Leu	Ser	Ser

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Pro	Val	Pro	Tyr	Thr	Asn	Ala	Val	His	Arg	Val	Cys	Leu	Pro	Asp			
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Phe	Gly	Ala	Leu	Lys	Asn	Asp	Gly	Tyr	Ser	Gln	Asn	His	Leu	Arg			
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Gln	Ala	Gln	Val	Thr	Leu	Ile	Asp	Ala	Thr	Thr	Cys	Asn	Glu	Pro			
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Gln	Ala	Tyr	Asn	Asp	Ala	Ile	Thr	Pro	Arg	Met	Leu	Cys	Ala	Gly			
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Ile	Val	Ser	Trp	Gly	Asp	Glu	Cys	Ala	Lys	Pro	Asn	Lys	Pro	Gly			
				395					400					405			
Val	Tyr	Thr	Arg	Val	Thr	Ala	Leu	Arg	Asp	Trp	Ile	Thr	Ser	Lys			
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<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

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<210> 108
 <211> 305
 <212> PRT
 <213> Homo Sapien

<400> 108

Met	Ala	Arg	Glu	Asp	Ser	Val	Lys	Cys	Leu	Arg	Cys	Leu	Leu	Tyr	1	5	10	15
Ala	Leu	Asn	Leu	Leu	Phe	Trp	Leu	Met	Ser	Ile	Ser	Val	Leu	Ala	20	25	30	
Val	Ser	Ala	Trp	Met	Arg	Asp	Tyr	Leu	Asn	Asn	Val	Leu	Thr	Leu	35	40	45	
Thr	Ala	Glu	Thr	Arg	Val	Glu	Glu	Ala	Val	Ile	Leu	Thr	Tyr	Phe	50	55	60	
Pro	Val	Val	His	Pro	Val	Met	Ile	Ala	Val	Cys	Cys	Phe	Leu	Ile	65	70	75	
Ile	Val	Gly	Met	Leu	Gly	Tyr	Cys	Gly	Thr	Val	Lys	Arg	Asn	Leu	80	85	90	
Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	95	100	105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	110	115	120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	125	130	135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	140	145	150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	155	160	165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	170	175	180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	185	190	195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	200	205	210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	215	220	225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	230	235	240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	245	250	255	

Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His
				260					265					270
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg
				275					280					285
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe
				290					295					300
Glu	Met	Glu	Glu	Leu										
				305										

<210> 109
 <211> 2339
 <212> DNA
 <213> Homo Sapien

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 agtattaaga ggattttcca gtgtttctgg cagttggtcc agaaggatgc 200
 ctccattcct gcttctcacc tgctcttcca tcacaggcac ctccgtgtca 250
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<210> 110
 <211> 545
 <212> PRT
 <213> Homo Sapien

<400> 110
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 Ser Val Ser Pro Val Ala Leu Asp Pro Cys Ser Ala Tyr Ile Ser
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 Leu Asn Glu Pro Trp Arg Asn Thr Asp His Gln Leu Asp Glu Ser
 35 40 45

Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr		50	55	60
His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile		65	70	75
Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly		80	85	90
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys		95	100	105
Ala	Ser	Phe	Asn	Gly	Asn	Cys	Cys	Leu	Trp	Asn	Thr	Thr	Val	Glu		110	115	120
Val	Lys	Ala	Cys	Pro	Gly	Gly	Tyr	Tyr	Val	Tyr	Arg	Leu	Thr	Lys		125	130	135
Pro	Ser	Val	Cys	Phe	His	Val	Tyr	Cys	Gly	His	Phe	Tyr	Asp	Ile		140	145	150
Cys	Asp	Glu	Asp	Cys	His	Gly	Ser	Cys	Ser	Asp	Thr	Ser	Glu	Cys		155	160	165
Thr	Cys	Ala	Pro	Gly	Thr	Val	Leu	Gly	Pro	Asp	Arg	Gln	Thr	Cys		170	175	180
Phe	Asp	Glu	Asn	Glu	Cys	Glu	Gln	Asn	Asn	Gly	Gly	Cys	Ser	Glu		185	190	195
Ile	Cys	Val	Asn	Leu	Lys	Asn	Ser	Tyr	Arg	Cys	Glu	Cys	Gly	Val		200	205	210
Gly	Arg	Val	Leu	Arg	Ser	Asp	Gly	Lys	Thr	Cys	Glu	Asp	Val	Glu		215	220	225
Gly	Cys	His	Asn	Asn	Asn	Gly	Gly	Cys	Ser	His	Ser	Cys	Leu	Gly		230	235	240
Ser	Glu	Lys	Gly	Tyr	Gln	Cys	Glu	Cys	Pro	Arg	Gly	Leu	Val	Leu		245	250	255
Ser	Glu	Asp	Asn	His	Thr	Cys	Gln	Val	Pro	Val	Leu	Cys	Lys	Ser		260	265	270
Asn	Ala	Ile	Glu	Val	Asn	Ile	Pro	Arg	Glu	Leu	Val	Gly	Gly	Leu		275	280	285
Glu	Leu	Phe	Leu	Thr	Asn	Thr	Ser	Cys	Arg	Gly	Val	Ser	Asn	Gly		290	295	300
Thr	His	Val	Asn	Ile	Leu	Phe	Ser	Leu	Lys	Thr	Cys	Gly	Thr	Val		305	310	315
Val	Asp	Val	Val	Asn	Asp	Lys	Ile	Val	Ala	Ser	Asn	Leu	Val	Thr		320	325	330
Gly	Leu	Pro	Lys	Gln	Thr	Pro	Gly	Ser	Ser	Gly	Asp	Phe	Ile	Ile		335	340	345
Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Val	Thr	Cys	Glu	Phe	Pro	Arg		350	355	360

Leu Tyr Thr Ile	Ser Glu Gly Tyr Val	Pro Asn Leu Arg Asn Ser	
365		370	375
Pro Leu Glu Ile	Met Ser Arg Asn His	Gly Ile Phe Pro Phe Thr	
380		385	390
Leu Glu Ile Phe	Lys Asp Asn Glu Phe	Glu Glu Pro Tyr Arg Glu	
395		400	405
Ala Leu Pro Thr	Leu Lys Leu Arg Asp	Ser Leu Tyr Phe Gly Ile	
410		415	420
Glu Pro Val Val	His Val Ser Gly Leu	Glu Ser Leu Val Glu Ser	
425		430	435
Cys Phe Ala Thr	Pro Thr Ser Lys Ile	Asp Glu Val Leu Lys Tyr	
440		445	450
Tyr Leu Ile Arg	Asp Gly Cys Val Ser	Asp Asp Ser Val Lys Gln	
455		460	465
Tyr Thr Ser Arg	Asp His Leu Ala Lys	His Phe Gln Val Pro Val	
470		475	480
Phe Lys Phe Val	Gly Lys Asp His Lys	Glu Val Phe Leu His Cys	
485		490	495
Arg Val Leu Val	Cys Gly Val Leu Asp	Glu Arg Ser Arg Cys Ala	
500		505	510
Gln Gly Cys His	Arg Arg Met Arg Arg	Gly Ala Gly Gly Glu Asp	
515		520	525
Ser Ala Gly Leu	Gln Gly Gln Thr Leu	Thr Gly Gly Pro Ile Arg	
530		535	540
Ile Asp Trp Glu Asp			
545			

<210> 111
 <211> 2063
 <212> DNA
 <213> Homo Sapien

<400> 111
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 cttggggtga caatctcagc tccaggctac agggagacgc ggaggatcac 200
 agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250
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<210> 112

<211> 432

<212> PRT

<213> Homo Sapien

<400> 112

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				20					25					30
Lys	Val	Gly	Ile	Pro	Ile	Ile	Ile	Ala	Leu	Leu	Ser	Leu	Ala	Ser
				35					40					45
Ile	Ile	Ile	Val	Val	Val	Leu	Ile	Lys	Val	Ile	Leu	Asp	Lys	Tyr
				50					55					60
Tyr	Phe	Leu	Cys	Gly	Gln	Pro	Leu	His	Phe	Ile	Pro	Arg	Lys	Gln
				65					70					75
Leu	Cys	Asp	Gly	Glu	Leu	Asp	Cys	Pro	Leu	Gly	Glu	Asp	Glu	Glu
				80					85					90
His	Cys	Val	Lys	Ser	Phe	Pro	Glu	Gly	Pro	Ala	Val	Ala	Val	Arg
				95					100					105
Leu	Ser	Lys	Asp	Arg	Ser	Thr	Leu	Gln	Val	Leu	Asp	Ser	Ala	Thr
				110					115					120
Gly	Asn	Trp	Phe	Ser	Ala	Cys	Phe	Asp	Asn	Phe	Thr	Glu	Ala	Leu
				125					130					135
Ala	Glu	Thr	Ala	Cys	Arg	Gln	Met	Gly	Tyr	Ser	Arg	Ala	Val	Glu
				140					145					150
Ile	Gly	Pro	Asp	Gln	Asp	Leu	Asp	Val	Val	Glu	Ile	Thr	Glu	Asn
				155					160					165
Ser	Gln	Glu	Leu	Arg	Met	Arg	Asn	Ser	Ser	Gly	Pro	Cys	Leu	Ser
				170					175					180
Gly	Ser	Leu	Val	Ser	Leu	His	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Leu
				185					190					195
Lys	Thr	Pro	Arg	Val	Val	Gly	Gly	Glu	Glu	Ala	Ser	Val	Asp	Ser
				200					205					210
Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys
				215					220					225
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His
				230					235					240
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala
				245					250					255
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys
				260					265					270
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp

275										280				285			
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr			
				290					295					300			
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro			
				305					310					315			
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn			
				320					325					330			
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val			
				335					340					345			
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu			
				350					355					360			
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val			
				365					370					375			
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser			
				380					385					390			
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys			
				395					400					405			
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr			
				410					415					420			
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu						
				425					430								

<210> 113
 <211> 1768
 <212> DNA
 <213> Homo Sapien

<400> 113
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 gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
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<210> 114
 <211> 109
 <212> PRT
 <213> Homo Sapien

<400> 114
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 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60

Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
65 70 75

Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
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Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
95 100 105

Arg Arg Arg Asp

<210> 115
<211> 1197
<212> DNA
<213> Homo Sapien

<400> 115
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gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
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gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
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ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
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tggttctaata aacttctaca ttatcaccaa aaaaaaaaaa aaaaaaa 1197

<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

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Asn	Ala	Glu	Ala	Phe	Lys	Ser	Lys	Lys	Ile	Cys	Lys	Ser	Leu	Lys	20	25	30	
Ile	Cys	Gly	Leu	Val	Phe	Gly	Ile	Leu	Ala	Leu	Thr	Leu	Ile	Val	35	40	45	
Leu	Phe	Trp	Gly	Ser	Lys	His	Phe	Trp	Pro	Glu	Val	Pro	Lys	Lys	50	55	60	
Ala	Tyr	Asp	Met	Glu	His	Thr	Phe	Tyr	Ser	Asn	Gly	Glu	Lys	Lys	65	70	75	
Lys	Ile	Tyr	Met	Glu	Ile	Asp	Pro	Val	Thr	Arg	Thr	Glu	Ile	Phe	80	85	90	
Arg	Ser	Gly	Asn	Gly	Thr	Asp	Glu	Thr	Leu	Glu	Val	His	Asp	Phe	95	100	105	
Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys	110	115	120	
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro	125	130	135	
Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe	140	145	150	
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn	155	160	165	
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn	170	175	180	
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu	185	190	195	
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala	200	205	210	
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro	215	220	225	
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu	230	235	240	
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe	245	250	255	
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg	260	265	270	
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly				

	275		280		285
Tyr Tyr Pro Tyr Pro Tyr Cys Tyr Gln Gly Gly Arg Val Ile Cys					
	290		295		300
Arg Val Ile Met Pro Cys Asn Trp Trp Val Ala Arg Met Leu Gly					
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Arg Val

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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tccttccaag cagcactatg tgtaatgctc taagacctct cagcacgggc 900
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ttctgctgtt tgaattttgt ctccccaccc ccaacttggc tagtaataaa 1350
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gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
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<210> 118
<211> 261
<212> PRT
<213> Homo Sapien

<400> 118
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Ser Thr Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln
35 40 45
Tyr Glu Gly Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe
50 55 60
Thr Glu Cys Arg Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met
65 70 75
Leu Gln Ala Val Arg Ala Leu Met Ile Val Gly Ile Val Leu Gly
80 85 90

Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg	
				95					100					105	
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr	
				110					115					120	
Ser	Gly	Ile	Met	Phe	Ile	Val	Ser	Gly	Leu	Cys	Ala	Ile	Ala	Gly	
				125					130					135	
Val	Ser	Val	Phe	Ala	Asn	Met	Leu	Val	Thr	Asn	Phe	Trp	Met	Ser	
				140					145					150	
Thr	Ala	Asn	Met	Tyr	Thr	Gly	Met	Gly	Gly	Met	Val	Gln	Thr	Val	
				155					160					165	
Gln	Thr	Arg	Tyr	Thr	Phe	Gly	Ala	Ala	Leu	Phe	Val	Gly	Trp	Val	
				170					175					180	
Ala	Gly	Gly	Leu	Thr	Leu	Ile	Gly	Gly	Val	Met	Met	Cys	Ile	Ala	
				185					190					195	
Cys	Arg	Gly	Leu	Ala	Pro	Glu	Glu	Thr	Asn	Tyr	Lys	Ala	Val	Ser	
				200					205					210	
Tyr	His	Ala	Ser	Gly	His	Ser	Val	Ala	Tyr	Lys	Pro	Gly	Gly	Phe	
				215					220					225	
Lys	Ala	Ser	Thr	Gly	Phe	Gly	Ser	Asn	Thr	Lys	Asn	Lys	Lys	Ile	
				230					235					240	
Tyr	Asp	Gly	Gly	Ala	Arg	Thr	Glu	Asp	Glu	Val	Gln	Ser	Tyr	Pro	
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Ser	Lys	His	Asp	Tyr	Val										
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<210> 119
 <211> 2010
 <212> DNA
 <213> Homo Sapien

<400> 119
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 cattgaaaac aacatcgtgg tttttgaaaa cttctgggaa ggactgtgga 250
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 tgaaatgcac caggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450
 ctgctgacgg ctggaatcat cttcatcatc acgggcatgg tgggtgctcat 500
 ccctgtgagc tggggttgcca atgccatcat cagagatttc tataactcaa 550

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aatgaatgtg ttctatttgc tttatacatt tatattaata aattgtacat 2000
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<210> 120
<211> 225
<212> PRT

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<213> Homo Sapien

<400> 120

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Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp	
				20					25					30	
Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn	
				35					40					45	
Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile	
				50					55					60	
Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro	
				65					70					75	
Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met	
				80					85					90	
Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr	
				95					100					105	
Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu	
				110					115					120	
Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile	
				125					130					135	
Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn	
				140					145					150	
Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu	
				155					160					165	
Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala	
				170					175					180	
Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr	
				185					190					195	
Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His	
				200					205					210	
Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val	
				215					220					225	

<210> 121

<211> 1257

<212> DNA

<213> Homo Sapien

<400> 121

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gccccgccgc ctccccgcag cggctccgcg gcctcctgct gctcctgctg 200
ctgcagctgc ccgcgccgctc gagcgctctt gagatcccca aggggaagca 250

aaaggcgcag ctccggcaga gggaggtggt ggacctgtat aatggaatgt 300
 gcttacaagg gccagcagga gtgcctggtc gagacgggag ccctggggcc 350
 aatgttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
 agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450
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 aaaattgcgg agtgtacatt tacaaagatg cgttcaaata gtgctctaag 550
 agttttgttc agtggctcac ttccggctaaa atgcagaaat gcatgctgtc 600
 agcgttggtta tttcacattc aatggagctg aatgttcagg acctcttccc 650
 attgaagcta taatttattt ggaccaagga agccctgaaa tgaattcaac 700
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<210> 122
 <211> 243
 <212> PRT
 <213> Homo Sapien

<400> 122
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 20 25 30
 Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
 35 40 45
 Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala
 50 55 60
 Gly Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro
 65 70 75

Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys	80	85	90
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn	95	100	105
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu	110	115	120
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser	125	130	135
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg	140	145	150
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu	155	160	165
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln	170	175	180
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser	185	190	195
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp	200	205	210
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp	215	220	225
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu	230	235	240

Leu Pro Lys

<210> 123
 <211> 2379
 <212> DNA
 <213> Homo Sapien

<400> 123
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 acaaaggatg ggttttcaatg taattaggct actgagcgga tcagctgtag 550

cactggttat agccccact gtcttactga caatgctttc ttctgccgaa 600
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 aacctggaac ttttggacct gggatataac cggatccgaa gtttagccag 1100
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<210> 124
<211> 513
<212> PRT
<213> Homo Sapien

<400> 124
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Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val
35 40 45
Tyr Cys Glu Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser
50 55 60
Ala Gly Cys Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys
65 70 75
Leu Lys Tyr Asn Gln Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu
80 85 90
Tyr Leu Asp His Asn His Ile Ser Asn Ile Asp Glu Asn Ala Phe
95 100 105
Asn Gly Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Arg
110 115 120
Ile Ser Tyr Phe Leu Asn Asn Thr Phe Arg Pro Val Thr Asn Leu
125 130 135
Arg Asn Leu Asp Leu Ser Tyr Asn Gln Leu His Ser Leu Gly Ser
140 145 150
Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu Ser Leu His Leu Arg
155 160 165
Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile Phe Gln Asp Cys
170 175 180
Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg Ile Arg Ser
185 190 195
Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys Glu Leu
200 205 210
His Leu Glu His Asn Gln Phe Ser Lys Leu Asn Leu Ala Leu Phe
215 220 225
Pro Arg Leu Val Ser Leu Gln Asn Leu Tyr Leu Gln Trp Asn Lys
230 235 240

Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu	245	250	255
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly	260	265	270
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu	275	280	285
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser	290	295	300
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu	305	310	315
Cys	Ser	Arg	Asn	Ile	Cys	Ser	Leu	Val	Asn	Trp	Leu	Lys	Ser	Phe	320	325	330
Lys	Gly	Leu	Arg	Glu	Asn	Thr	Ile	Ile	Cys	Ala	Ser	Pro	Lys	Glu	335	340	345
Leu	Gln	Gly	Val	Asn	Val	Ile	Asp	Ala	Val	Lys	Asn	Tyr	Ser	Ile	350	355	360
Cys	Gly	Lys	Ser	Thr	Thr	Glu	Arg	Phe	Asp	Leu	Ala	Arg	Ala	Leu	365	370	375
Pro	Lys	Pro	Thr	Phe	Lys	Pro	Lys	Leu	Pro	Arg	Pro	Lys	His	Glu	380	385	390
Ser	Lys	Pro	Pro	Leu	Pro	Pro	Thr	Val	Gly	Ala	Thr	Glu	Pro	Gly	395	400	405
Pro	Glu	Thr	Asp	Ala	Asp	Ala	Glu	His	Ile	Ser	Phe	His	Lys	Ile	410	415	420
Ile	Ala	Gly	Ser	Val	Ala	Leu	Phe	Leu	Ser	Val	Leu	Val	Ile	Leu	425	430	435
Leu	Val	Ile	Tyr	Val	Ser	Trp	Lys	Arg	Tyr	Pro	Ala	Ser	Met	Lys	440	445	450
Gln	Leu	Gln	Gln	Arg	Ser	Leu	Met	Arg	Arg	His	Arg	Lys	Lys	Lys	455	460	465
Arg	Gln	Ser	Leu	Lys	Gln	Met	Thr	Pro	Ser	Thr	Gln	Glu	Phe	Tyr	470	475	480
Val	Asp	Tyr	Lys	Pro	Thr	Asn	Thr	Glu	Thr	Ser	Glu	Met	Leu	Leu	485	490	495
Asn	Gly	Thr	Gly	Pro	Cys	Thr	Tyr	Asn	Lys	Ser	Gly	Ser	Arg	Glu	500	505	510

Cys Glu Val

<210> 125
 <211> 998
 <212> DNA
 <213> Homo Sapien

<400> 125

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 ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550
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 ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
 gctttttacc atcttggtg agaatgaccc cttggtcaat ggtgttctgg 950
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<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

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Arg	Trp	Pro	Arg	Ala	Ser	Lys	Phe	Leu	Leu	Ser	Gly	Cys	Ala	Ala
				20					25					30
Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35					40					45
Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
				50					55					60
Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
				65					70					75
Leu	Gly	Ile	Ile	Glu	Glu	Glu	Gly	Phe	Leu	Lys	Leu	Trp	Gln	Gly
				80					85					90

Val Thr Pro Ala Ile Tyr Arg His Val	Val Tyr Ser Gly Gly Arg	95	100	105
Met Val Thr Tyr Glu His Leu Arg Glu	Val Val Phe Gly Lys Ser	110	115	120
Glu Asp Glu His Tyr Pro Leu Trp Lys	Ser Val Ile Gly Gly Met	125	130	135
Met Ala Gly Val Ile Gly Gln Phe Leu	Ala Asn Pro Thr Asp Leu	140	145	150
Val Lys Val Gln Met Gln Met Glu Gly	Lys Arg Lys Leu Glu Gly	155	160	165
Lys Pro Leu Arg Phe Arg Gly Val His	His Ala Phe Ala Lys Ile	170	175	180
Leu Ala Glu Gly Gly Ile Arg Gly Leu	Trp Ala Gly Trp Val Pro	185	190	195
Asn Ile Gln Arg Ala Ala Leu Val Asn	Met Gly Asp Leu Thr Thr	200	205	210
Tyr Asp Thr Val Lys His Tyr Leu Val	Leu Asn Thr Pro Leu Glu	215	220	225
Asp Asn Ile Met Thr His Gly Leu Ser	Ser Leu Cys Ser Gly Leu	230	235	240
Val Ala Ser Ile Leu Gly Thr Pro Ala	Asp Val Ile Lys Ser Arg	245	250	255
Ile Met Asn Gln Pro Arg Asp Lys Gln	Gly Arg Gly Leu Leu Tyr	260	265	270
Lys Ser Ser Thr Asp Cys Leu Ile Gln	Ala Val Gln Gly Glu Gly	275	280	285
Phe Met Ser Leu Tyr Lys Gly Phe Leu	Pro Ser Trp Leu Arg Met	290	295	300
Thr Pro Trp Ser Met Val Phe Trp Leu	Thr Tyr Glu Lys Ile Arg	305	310	315
Glu Met Ser Gly Val Ser Pro Phe		320		

<210> 127
 <211> 1505
 <212> DNA
 <213> Homo Sapien

<400> 127
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 gcgctggtga cgggggcctc ggggggcata ggcgcggccg tggcccgggc 200
 cctggtccag cagggactga aggtggtggg ctgcgcccgc actgtgggca 250

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atgctggctt gggccggcct gacaccctgc tctcaggcag caccagtgg 450
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ggatgtggcc gaggtgtta tctacgtcct cagcaccctc gcacacatcc 850
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<210> 128
<211> 260
<212> PRT
<213> Homo Sapien

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<400> 128
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Val Thr Gly Ala Ser Gly Gly Ile Gly Ala Ala Val Ala Arg Ala
          20            25            30

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Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	
				50					55					60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	
				65					70					75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	
				80					85					90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	
				95					100					105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	
				110					115					120	
Asn	Val	Leu	Ala	Leu	Ser	Ile	Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	
				125					130					135	
Met	Lys	Glu	Arg	Asn	Val	Asp	Asp	Gly	His	Ile	Ile	Asn	Ile	Asn	
				140					145					150	
Ser	Met	Ser	Gly	His	Arg	Val	Leu	Pro	Leu	Ser	Val	Thr	His	Phe	
				155					160					165	
Tyr	Ser	Ala	Thr	Lys	Tyr	Ala	Val	Thr	Ala	Leu	Thr	Glu	Gly	Leu	
				170					175					180	
Arg	Gln	Glu	Leu	Arg	Glu	Ala	Gln	Thr	His	Ile	Arg	Ala	Thr	Cys	
				185					190					195	
Ile	Ser	Pro	Gly	Val	Val	Glu	Thr	Gln	Phe	Ala	Phe	Lys	Leu	His	
				200					205					210	
Asp	Lys	Asp	Pro	Glu	Lys	Ala	Ala	Ala	Thr	Tyr	Glu	Gln	Met	Lys	
				215					220					225	
Cys	Leu	Lys	Pro	Glu	Asp	Val	Ala	Glu	Ala	Val	Ile	Tyr	Val	Leu	
				230					235					240	
Ser	Thr	Pro	Ala	His	Ile	Gln	Ile	Gly	Asp	Ile	Gln	Met	Arg	Pro	
				245					250					255	
Thr	Glu	Gln	Val	Thr											
				260											

<210> 129
 <211> 1177
 <212> DNA
 <213> Homo Sapien

<400> 129
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 ctgctcagag ggccctcgcc cagaattcca gttctggttt catgccagcc 200
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 ttcagtagcc accagccacc tgtggccgtt gaggcttga aatgaggaac 350
 tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400
 actgatagtt gtacatattt gggggtacat gtgatatttg gatacatgta 450
 tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500
 acatttattt tttattcttt ttagacagag tctactctg tcaccaggc 550
 tggagtgcag tggtgccatc tcagcttact gcaacctctg cctgccaggt 600
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 aattaaaata accacacatg gcaaaaa 1177

<210> 130
 <211> 111
 <212> PRT
 <213> Homo Sapien

<400> 130
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 Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro
 20 25 30
 Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg
 35 40 45
 Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val
 50 55 60
 Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro
 65 70 75
 Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser
 80 85 90
 Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val

Ala Val Glu Cys Leu Lys
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<210> 131

<211> 2061

<212> DNA

<213> Homo Sapien

<400> 131

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 gaggtgatgg t 2061

<210> 132
 <211> 649
 <212> PRT
 <213> Homo Sapien

<400> 132
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 35 40 45
 Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala
 50 55 60
 Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile
 65 70 75
 Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
 80 85 90
 Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr
 95 100 105
 Val Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr
 110 115 120
 Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu

				125					130					135
Asp	Asp	Asn	Ser	Val	Ser	Ala	Val	Ser	Ile	Glu	Glu	Gly	Ala	Phe
				140					145					150
Arg	Asp	Ser	Asn	Tyr	Leu	Arg	Leu	Leu	Phe	Leu	Ser	Arg	Asn	His
				155					160					165
Leu	Ser	Thr	Ile	Pro	Trp	Gly	Leu	Pro	Arg	Thr	Ile	Glu	Glu	Leu
				170					175					180
Arg	Leu	Asp	Asp	Asn	Arg	Ile	Ser	Thr	Ile	Ser	Ser	Pro	Ser	Leu
				185					190					195
Gln	Gly	Leu	Thr	Ser	Leu	Lys	Arg	Leu	Val	Leu	Asp	Gly	Asn	Leu
				200					205					210
Leu	Asn	Asn	His	Gly	Leu	Gly	Asp	Lys	Val	Phe	Phe	Asn	Leu	Val
				215					220					225
Asn	Leu	Thr	Glu	Leu	Ser	Leu	Val	Arg	Asn	Ser	Leu	Thr	Ala	Ala
				230					235					240
Pro	Val	Asn	Leu	Pro	Gly	Thr	Asn	Leu	Arg	Lys	Leu	Tyr	Leu	Gln
				245					250					255
Asp	Asn	His	Ile	Asn	Arg	Val	Pro	Pro	Asn	Ala	Phe	Ser	Tyr	Leu
				260					265					270
Arg	Gln	Leu	Tyr	Arg	Leu	Asp	Met	Ser	Asn	Asn	Asn	Leu	Ser	Asn
				275					280					285
Leu	Pro	Gln	Gly	Ile	Phe	Asp	Asp	Leu	Asp	Asn	Ile	Thr	Gln	Leu
				290					295					300
Ile	Leu	Arg	Asn	Asn	Pro	Trp	Tyr	Cys	Gly	Cys	Lys	Met	Lys	Trp
				305					310					315
Val	Arg	Asp	Trp	Leu	Gln	Ser	Leu	Pro	Val	Lys	Val	Asn	Val	Arg
				320					325					330
Gly	Leu	Met	Cys	Gln	Ala	Pro	Glu	Lys	Val	Arg	Gly	Met	Ala	Ile
				335					340					345
Lys	Asp	Leu	Asn	Ala	Glu	Leu	Phe	Asp	Cys	Lys	Asp	Ser	Gly	Ile
				350					355					360
Val	Ser	Thr	Ile	Gln	Ile	Thr	Thr	Ala	Ile	Pro	Asn	Thr	Val	Tyr
				365					370					375
Pro	Ala	Gln	Gly	Gln	Trp	Pro	Ala	Pro	Val	Thr	Lys	Gln	Pro	Asp
				380					385					390
Ile	Lys	Asn	Pro	Lys	Leu	Thr	Lys	Asp	Gln	Gln	Thr	Thr	Gly	Ser
				395					400					405
Pro	Ser	Arg	Lys	Thr	Ile	Thr	Ile	Thr	Val	Lys	Ser	Val	Thr	Ser
				410					415					420
Asp	Thr	Ile	His	Ile	Ser	Trp	Lys	Leu	Ala	Leu	Pro	Met	Thr	Ala
				425					430					435
Leu	Arg	Leu	Ser	Trp	Leu	Lys	Leu	Gly	His	Ser	Pro	Ala	Phe	Gly

	440		445		450
Ser Ile Thr Glu	Thr Ile Val Thr Gly	Glu Arg Ser Glu Tyr	Leu		
	455		460		465
Val Thr Ala Leu	Glu Pro Asp Ser Pro	Tyr Lys Val Cys Met	Val		
	470		475		480
Pro Met Glu Thr	Ser Asn Leu Tyr Leu	Phe Asp Glu Thr Pro	Val		
	485		490		495
Cys Ile Glu Thr	Glu Thr Ala Pro Leu	Arg Met Tyr Asn Pro	Thr		
	500		505		510
Thr Thr Leu Asn	Arg Glu Gln Glu Lys	Glu Pro Tyr Lys Asn	Pro		
	515		520		525
Asn Leu Pro Leu	Ala Ala Ile Ile Gly	Gly Ala Val Ala Leu	Val		
	530		535		540
Thr Ile Ala Leu	Leu Ala Leu Val Cys	Trp Tyr Val His Arg	Asn		
	545		550		555
Gly Ser Leu Phe	Ser Arg Asn Cys Ala	Tyr Ser Lys Gly Arg	Arg		
	560		565		570
Arg Lys Asp Asp	Tyr Ala Glu Ala Gly	Thr Lys Lys Asp Asn	Ser		
	575		580		585
Ile Leu Glu Ile	Arg Glu Thr Ser Phe	Gln Met Leu Pro Ile	Ser		
	590		595		600
Asn Glu Pro Ile	Ser Lys Glu Glu Phe	Val Ile His Thr Ile	Phe		
	605		610		615
Pro Pro Asn Gly	Met Asn Leu Tyr Lys	Asn Asn His Ser Glu	Ser		
	620		625		630
Ser Ser Asn Arg	Ser Tyr Arg Asp Ser	Gly Ile Pro Asp Ser	Asp		
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His Ser His Ser

<210> 133
 <211> 1882
 <212> DNA
 <213> Homo Sapien

<400> 133
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 gggaggtggg aaggaggtgg gaggagggcg tgcagaggca gtctgggctt 150
 ggccagagct caggggtgctg agcgtgtgac cagcagtgag cagaggccgg 200
 ccatggccag cctggggctg ctgctcctgc tcttactgac agcactgcca 250
 ccgctgtggt cctcctcact gcctgggctg gacactgctg aaagtaaagc 300
 caccattgca gacctgatcc tgtctgcgct ggagagagcc accgtcttcc 350

tagaacagag gctgcctgaa atcaacctgg atggcatggt ggggggtccga 400
gtgctggaag agcagctaaa aagtgtccgg gagaagtggg cccaggagcc 450
cctgctgcag ccgctgagcc tgcgcgtggg gatgctgggg gagaagctgg 500
aggctgccat ccagagatcc ctccactacc tcaagctgag tgatcccaag 550
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aataaagttc aactgcaact gaaaaaaaaa aa 1882

<210> 134

<211> 440
 <212> PRT
 <213> Homo Sapien

<400> 134

Met	Ser	Ala	Arg	Gly	Arg	Trp	Glu	Gly	Gly	Gly	Arg	Arg	Ala	Cys	1	5	10	15
Arg	Gly	Ser	Leu	Gly	Leu	Ala	Arg	Ala	Gln	Gly	Ala	Glu	Arg	Val	20	25	30	
Thr	Ser	Ser	Glu	Gln	Arg	Pro	Ala	Met	Ala	Ser	Leu	Gly	Leu	Leu	35	40	45	
Leu	Leu	Leu	Leu	Leu	Thr	Ala	Leu	Pro	Pro	Leu	Trp	Ser	Ser	Ser	50	55	60	
Leu	Pro	Gly	Leu	Asp	Thr	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Ala	Asp	65	70	75	
Leu	Ile	Leu	Ser	Ala	Leu	Glu	Arg	Ala	Thr	Val	Phe	Leu	Glu	Gln	80	85	90	
Arg	Leu	Pro	Glu	Ile	Asn	Leu	Asp	Gly	Met	Val	Gly	Val	Arg	Val	95	100	105	
Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	110	115	120	
Pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	125	130	135	
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	140	145	150	
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	155	160	165	
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	170	175	180	
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	185	190	195	
Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp	200	205	210	
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	215	220	225	
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	230	235	240	
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	245	250	255	
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	260	265	270	
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	275	280	285	
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly				

290										295					300				
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser					
				305					310					315					
Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu					
				320					325					330					
Asp	Glu	Glu	Leu	Ser	Lys	Ala	Ile	Gln	Tyr	Gln	Gln	His	Phe	Ser					
				335					340					345					
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser					
				350					355					360					
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln					
				365					370					375					
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro					
				380					385					390					
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe					
				395					400					405					
Tyr	Ile	Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val	Ala	His	Ala					
				410					415					420					
Gly	Leu	Glu	Leu	Leu	Ile	Ser	Arg	Asp	Pro	Pro	Thr	Ser	Gly	Ser					
				425					430					435					
Gln	Ser	Val	Gly	Leu															
				440															

<210> 135
 <211> 884
 <212> DNA
 <213> Homo Sapien

<400> 135
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 gccgggggct gctgctgagg gatcgggagg gaggggggtc ggcataggag 150
 atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200
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 cttatgtagt ggaagttgta tctccagctt acagatttga tcccgttcga 350
 gtggatatca cttcgaaagg aaaaatgaga gcaagatatg tgaattacat 400
 caaaacatca gaggttgtca gactgcccta tcctctccaa atgaaatctt 450
 caggccacc ttcttacttt attaaaaggg aatcgtgggg ctggacagac 500
 tttctaata acccaatggg tatgatgatg gttcttctt tattgatatt 550
 tgtgcttctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600
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gtttctgagt tcatgacaag actcttctct tcaaaatcat ctggcaaadc 700
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agtcaggccg tccagagctg gcatttgcac aaacacggca aactgggtg 800
gcatccaagt cttggaaaac cgtgtgaagc aactactata aacttgagtc 850
atccccgacgt tgatctctta caactgtgta tggt 884

<210> 136
<211> 242
<212> PRT
<213> Homo Sapien

<400> 136
Met Ala Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu
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Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala
20 25 30
Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
35 40 45
Lys Ile Glu Gly Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
50 55 60
Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu Glu His Val
65 70 75
Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
80 85 90
Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
95 100 105
Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
110 115 120
Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
125 130 135
Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
140 145 150
Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
155 160 165
Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
170 175 180
Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu
185 190 195
Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val
200 205 210
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys
215 220 225
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys
230 235 240

Arg Arg

<210> 137

<211> 1571

<212> DNA

<213> Homo Sapien

<400> 137

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atgtcattct ctatctattc actgcaagtg cctgctgttc caggccttac 200
ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
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gtatttttat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300
ctaggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350
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tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
aatcctacac ggccagcatg tatttctaca aataaagttt tctttgcata 1550
ccaaaaaaaa aaaaaaaaaa a 1571

<210> 138
<211> 261
<212> PRT
<213> Homo Sapien

<400> 138
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Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu
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Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys
35 40 45
Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
50 55 60
Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
65 70 75
Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
80 85 90
Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
95 100 105
Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
110 115 120
Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
125 130 135
Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu
140 145 150
Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
155 160 165
Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe
170 175 180
Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser
185 190 195
Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu
200 205 210
Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys
215 220 225
Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln
230 235 240

Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln
245 250 255

Trp Met Glu Glu Thr Glu
260

<210> 139
<211> 2395
<212> DNA
<213> Homo Sapien

<400> 139
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tcgctacctg ttgcgtagcg atcgaggtgc tagggatcgc ggtcttcctt 150
cggggattct tcccggctcc cgttcggttc tctgccagag cggaacacgg 200
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 gcctcatcag gtccagattt ctttccaagg cggacgtttt ctgttggaat 2000
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 aacctgcac agccctcatc ccctcttggc ttgagccgtc agaggccctg 2200
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 tatgtagtta ccaaaagaat aaacggcaat aattgagaaa aaaaa 2395.

<210> 140
 <211> 310
 <212> PRT
 <213> Homo Sapien

<400> 140
 Met Arg Leu Gly Ser Gly Thr Phe Ala Thr Cys Cys Val Ala Ile
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 Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala
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 Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro
 35 40 45
 Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu
 50 55 60
 Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala

65					70					75				
Leu	Arg	Asp	Asp	Phe	Val	Phe	Gly	Ser	Lys	Gly	Val	Lys	Phe	Met
				80					85					90
Pro	Tyr	Thr	Thr	Tyr	Leu	Val	Glu	Lys	Gly	Ala	Ser	His	Ser	Phe
				95					100					105
Val	Ala	Glu	Ala	Lys	Pro	Pro	Thr	Val	Thr	Met	Pro	Arg	Ile	Lys
				110					115					120
Ala	Leu	Met	Thr	Gly	Ser	Leu	Pro	Gly	Phe	Val	Asp	Val	Ile	Arg
				125					130					135
Asn	Leu	Asn	Ser	Pro	Ala	Leu	Leu	Glu	Asp	Ser	Val	Ile	Arg	Gln
				140					145					150
Ala	Lys	Ala	Ala	Gly	Lys	Arg	Ile	Val	Phe	Tyr	Gly	Asp	Glu	Thr
				155					160					165
Trp	Val	Lys	Leu	Phe	Pro	Lys	His	Phe	Val	Glu	Tyr	Asp	Gly	Thr
				170					175					180
Thr	Ser	Phe	Phe	Val	Ser	Asp	Tyr	Thr	Glu	Val	Asp	Asn	Asn	Val
				185					190					195
Thr	Arg	His	Leu	Asp	Lys	Val	Leu	Lys	Arg	Gly	Asp	Trp	Asp	Ile
				200					205					210
Leu	Ile	Leu	His	Tyr	Leu	Gly	Leu	Asp	His	Ile	Gly	His	Ile	Ser
				215					220					225
Gly	Pro	Asn	Ser	Pro	Leu	Ile	Gly	Gln	Lys	Leu	Ser	Glu	Met	Asp
				230					235					240
Ser	Val	Leu	Met	Lys	Ile	His	Thr	Ser	Leu	Gln	Ser	Lys	Glu	Arg
				245					250					255
Glu	Thr	Pro	Leu	Pro	Asn	Leu	Leu	Val	Leu	Cys	Gly	Asp	His	Gly
				260					265					270
Met	Ser	Glu	Thr	Gly	Ser	His	Gly	Ala	Ser	Ser	Thr	Glu	Glu	Val
				275					280					285
Asn	Thr	Pro	Leu	Ile	Leu	Ile	Ser	Ser	Ala	Phe	Glu	Arg	Lys	Pro
				290					295					300
Gly	Asp	Ile	Arg	His	Pro	Lys	His	Val	Gln					
				305					310					

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

ggcacgaggc aagccttcca gggtatcgtg acgcaccttg aaagtctgag 50

agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100

tgatgttact gctgctgttg gactacaact tccctataga aaacaactgc 150

cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200

gaaattcagc attcatgacc aggatcacaa agtactggtc ctggactctg 250
 ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300
 tttgcattag cctcatcctt gagctcagcc tctgcggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450
 aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500
 ggctcaggtg ggctcctgga acatgctgga gtcggcggct caccctcgat 550
 ggttcatctg cacctcctgc aattgtaatg agcctgttgg ggtgacagat 600
 aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650
 agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700
 acgccttcct cgctaatttg aactaattgt ataaaaacac caaacctgct 750
 cact 754

<210> 142
 <211> 193
 <212> PRT
 <213> Homo Sapien

<400> 142
 Met Leu Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn
 1 5 10 15
 Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu
 20 25 30
 Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu
 35 40 45
 Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr
 50 55 60
 Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser
 65 70 75
 Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys
 80 85 90
 Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His
 95 100 105
 Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala
 110 115 120
 Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln
 125 130 135
 Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp
 140 145 150
 Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr
 155 160 165

Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro
170 175 180

Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp
185 190

<210> 143
<211> 961
<212> DNA
<213> Homo Sapien.

<400> 143
ctagagagta tagggcagaa ggatggcaga tgagtgactc cacatccaga 50
gctgcctccc tttaatccag gatcctgtcc ttctgtcct gtaggagtgc 100
ctgttgccag tgtggggtga gacaagtttg tcccacaggg ctgtctgagc 150
agataagatt aagggtgagg tctgtgtcga attaactcct gtgggcacgg 200
gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250
cctgccgtgg aagggtgagg tgtcctgggc gctgctgctg cttctcttag 300
gctcccagat cctgctgac tatgcctggc atttccacga gcaaaggac 350
tgtgatgaac acaatgtcat ggctcggtac ctccctgcca cagtggagtt 400
tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450
tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta 500
ttctcaatgg agctactgct ggggagaact aggtgtggga aatttgaaga 550
cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600
tcacctgctt cttcaccatc agcaccaggc cctggatgac tcagttcagc 650
ctcctgaaca agacctgctt ggagggttc cactgagtga aaccactca 700
caggcttgct catgtgctgc tcccacattc cgtggacatc agcactactc 750
tcctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800
atcttgcatg tgcttgagat ctgagatcag tgcttttagaa aatccacaca 850
tcttgagcct aatcatgtag tgtagatcat taaacatcag cattttaaga 900
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950
aaaaaaaaa a 961

<210> 144
<211> 147
<212> PRT
<213> Homo Sapien

<400> 144
Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu
1 5 10 15
Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
20 25 30

Phe	His	Glu	Gln	Arg	Asp	Cys	Asp	Glu	His	Asn	Val	Met	Ala	Arg	35	40	45
Tyr	Leu	Pro	Ala	Thr	Val	Glu	Phe	Ala	Val	His	Thr	Phe	Asn	Gln	50	55	60
Gln	Ser	Lys	Asp	Tyr	Tyr	Ala	Tyr	Arg	Leu	Gly	His	Ile	Leu	Asn	65	70	75
Ser	Trp	Lys	Glu	Gln	Val	Glu	Ser	Lys	Thr	Val	Phe	Ser	Met	Glu	80	85	90
Leu	Leu	Leu	Gly	Arg	Thr	Arg	Cys	Gly	Lys	Phe	Glu	Asp	Asp	Ile	95	100	105
Asp	Asn	Cys	His	Phe	Gln	Glu	Ser	Thr	Glu	Leu	Asn	Asn	Thr	Phe	110	115	120
Thr	Cys	Phe	Phe	Thr	Ile	Ser	Thr	Arg	Pro	Trp	Met	Thr	Gln	Phe	125	130	135
Ser	Leu	Leu	Asn	Lys	Thr	Cys	Leu	Glu	Gly	Phe	His				140	145	

<210> 145
 <211> 1157
 <212> DNA
 <213> Homo Sapien

<400> 145
 ctgtgcagct cgaggctcca gaggcacact ccagagagag ccaaggttct 50
 gacgcgatga ggaagcacct gagctggtgg tggttgcca ctgtctgcat 100
 gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaagcaca 150
 gaatcaagtg gaaccggaag gccctgcca gcactgcca gatcactgag 200
 gccaggtgg ctgagaaccg cccgggagcc ttcatacagc aaggccgcaa 250
 gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300
 actggcagtt ccccgatggc atccactaca acggctgctc tgaggctaata 350
 gtgaccaagg aggcatttgt caccggctgc atcaatgcca ccagggcggc 400
 gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
 tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500
 ttggagaggg gcgcaggact tcgggtcacc atgcaccagc cagtgtcct 550
 ctgccttctg gctttgatct ggctcatggt gaaataagct tgccaggagg 600
 ctggcagtag agagcgcagc agcgagcaaa tcctggcaag tgaccagct 650
 cttctcccc aaaccacgc gtgttctgaa ggtgcccagg agcggcgatg 700
 cactcgcact gcaaataccg ctcccacgta tgcgccttg tatgtgcctg 750
 cgttctgata gatgggggac tgtggcttct ccgtcactcc attctcagcc 800
 cctagcagag cgtctggcac actagattag tagtaaagtc ttgatgagaa 850

gaacacatca ggcactgcgc cacctgcttc acagtacttc ccaacaactc 900
 ttagaggtag gtgtattccc gttttacaga taaggaaact gaggcccaga 950
 gagctgaagt actgcaccca gcatcaccag ctagaaagtg gcagagccag 1000
 gattcaaccc tggcttgtct aaccccaggt tttctgctct gtccaattcc 1050
 agagctgtct ggtgatcact ttatgtctca cagggaccca catccaaaca 1100
 tgtatctcta atgaaattgt gaaagctcca tgtttagaaa taaatgaaaa 1150
 cacctga 1157

<210> 146
 <211> 176
 <212> PRT
 <213> Homo Sapien

<400> 146
 Met Arg Lys His Leu Ser Trp Trp Trp Leu Ala Thr Val Cys Met
 1 5 10 15
 Leu Leu Phe Ser His Leu Ser Ala Val Gln Thr Arg Gly Ile Lys
 20 25 30
 His Arg Ile Lys Trp Asn Arg Lys Ala Leu Pro Ser Thr Ala Gln
 35 40 45
 Ile Thr Glu Ala Gln Val Ala Glu Asn Arg Pro Gly Ala Phe Ile
 50 55 60
 Lys Gln Gly Arg Lys Leu Asp Ile Asp Phe Gly Ala Glu Gly Asn
 65 70 75
 Arg Tyr Tyr Glu Ala Asn Tyr Trp Gln Phe Pro Asp Gly Ile His
 80 85 90
 Tyr Asn Gly Cys Ser Glu Ala Asn Val Thr Lys Glu Ala Phe Val
 95 100 105
 Thr Gly Cys Ile Asn Ala Thr Gln Ala Ala Asn Gln Gly Glu Phe
 110 115 120
 Gln Lys Pro Asp Asn Lys Leu His Gln Gln Val Leu Trp Arg Leu
 125 130 135
 Val Gln Glu Leu Cys Ser Leu Lys His Cys Glu Phe Trp Leu Glu
 140 145 150
 Arg Gly Ala Gly Leu Arg Val Thr Met His Gln Pro Val Leu Leu
 155 160 165
 Cys Leu Leu Ala Leu Ile Trp Leu Met Val Lys
 170 175

<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

<400> 147
 gccttgccct cccaaagggc tgggattata ggcgtgacca ccatgtctgg 50

tccagagtct catttctga tgatttatag actcaaagaa aactcatgtt 100
 cagaagctct cttctcttct ggctctctct ctgtcttctt tccctctttc 150
 ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
 tttcattttg cttgtcagtg gggtaggtca ctgagtctta gtttttattt 250
 tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300
 atgagtatat tgcgatgatgc tgaggtttgg ggt 333

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 148
 Met Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
 1 5 10 15
 Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
 20 25 30
 Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
 35 40 45
 Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
 50 55 60
 Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
 65 70

<210> 149
 <211> 1893
 <212> DNA
 <213> Homo Sapien

<400> 149
 gtctccgcgt cacaggaact tcagcaccca cagggcggac agcgctcccc 50
 tctacctgga gacttgactc ccgcgcgccc caaccctgct tatcccttga 100
 ccgtcgagtg tcagagatcc tgcagccgcc cagtcccggc cctctctccg 150
 cccacacccc accctcctgg ctcttctgt ttttactcct ctttttcatt 200
 cataacaaaa gctacagctc caggagccca gcgcggggt gtgaccaag 250
 ccgagcgtgg aagaatgggg ttctcggga ccggcacttg gattctggtg 300
 ttagtgctcc cgattcaagc tttcccaaaa cctggaggaa gccaagacaa 350
 atctctacat aatagagaat taagtgcaga aagaccttg aatgaacaga 400
 ttgctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450
 aagccaggtc agagcaacta ttcttttgtt gataacttga acctgctaaa 500
 ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
 gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600

aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650
taaattttcaa gatgatccag atgggtcttca tcaactagac gggactcctt 700
taaccgctga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750
aatgacagag ccgtgtttga caagattggt tctaaactac ttaatctcgg 800
ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850
ttttacaaaa attaacttca aaggaagcca acaattatga ggaggatccc 900
aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
agtgactcca atggcagcaa ttcaagatgg tcttgctaag ggagaaaacg 1000
atgaaacagt atctaacaca ttaaccttga caaatggctt ggaaaggaga 1050
actaaaacct acagtgaaga caactttgag gaactccaat atttcccaa 1100
tttctatgcg ctactgaaaa gtattgattc agaaaaagaa gcaaaagaga 1150
aagaaacact gattactatc atgaaaacac tgattgactt tgtgaagatg 1200
atggtgaaat atggaacaat atctccagaa gaaggtgttt cctaccttga 1250
aaacttggat gaaatgattg ctcttcagac caaaaacaag ctagaaaaaa 1300
atgctactga caatataagc aagcttttcc cagcaccatc agagaagagt 1350
catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400
atatggaagc ttgaaggatt ccacaaaaga tgataactcc aaccaggag 1450
gaaagacaga tgaacccaaa ggaaaaacag aagcctatctt ggaagccatc 1500
agaaaaaata ttgaatgggt gaagaaacat gacaaaaagg gaaataaaga 1550
agattatgac ctttcaaaga tgagagactt catcaataaa caagctgatg 1600
cttatgtgga gaaaggcatc cttgacaagg aagaagccga ggccatcaag 1650
cgcatttata gcagcctgta aaaatggcaa aagatccagg agtctttcaa 1700
ctgtttcaga aaacataata tagcttaaaa cacttctaata tctgtgatta 1750
aaattttttg acccaaggggt tattagaaag tgctgaattt acagtagtta 1800
accttttaca agtgggttaaa acatagcttt cttcccgtaa aaactatctg 1850
aaagtaaagt tgtatgtaag ctgaaaaaaa aaaaaaaaaa aaa 1893

<210> 150
<211> 468
<212> PRT
<213> Homo Sapien

<400> 150
Met Gly Phe Leu Gly Thr Gly Thr Trp Ile Leu Val Leu Val Leu
1 5 10 15
Pro Ile Gln Ala Phe Pro Lys Pro Gly Gly Ser Gln Asp Lys Ser
20 25 30

Leu	His	Asn	Arg	Glu	Leu	Ser	Ala	Glu	Arg	Pro	Leu	Asn	Glu	Gln	35	40	45
Ile	Ala	Glu	Ala	Glu	Glu	Asp	Lys	Ile	Lys	Lys	Thr	Tyr	Pro	Pro	50	55	60
Glu	Asn	Lys	Pro	Gly	Gln	Ser	Asn	Tyr	Ser	Phe	Val	Asp	Asn	Leu	65	70	75
Asn	Leu	Leu	Lys	Ala	Ile	Thr	Glu	Lys	Glu	Lys	Ile	Glu	Lys	Glu	80	85	90
Arg	Gln	Ser	Ile	Arg	Ser	Ser	Pro	Leu	Asp	Asn	Lys	Leu	Asn	Val	95	100	105
Glu	Asp	Val	Asp	Ser	Thr	Lys	Asn	Arg	Lys	Leu	Ile	Asp	Asp	Tyr	110	115	120
Asp	Ser	Thr	Lys	Ser	Gly	Leu	Asp	His	Lys	Phe	Gln	Asp	Asp	Pro	125	130	135
Asp	Gly	Leu	His	Gln	Leu	Asp	Gly	Thr	Pro	Leu	Thr	Ala	Glu	Asp	140	145	150
Ile	Val	His	Lys	Ile	Ala	Ala	Arg	Ile	Tyr	Glu	Glu	Asn	Asp	Arg	155	160	165
Ala	Val	Phe	Asp	Lys	Ile	Val	Ser	Lys	Leu	Leu	Asn	Leu	Gly	Leu	170	175	180
Ile	Thr	Glu	Ser	Gln	Ala	His	Thr	Leu	Glu	Asp	Glu	Val	Ala	Glu	185	190	195
Val	Leu	Gln	Lys	Leu	Ile	Ser	Lys	Glu	Ala	Asn	Asn	Tyr	Glu	Glu	200	205	210
Asp	Pro	Asn	Lys	Pro	Thr	Ser	Trp	Thr	Glu	Asn	Gln	Ala	Gly	Lys	215	220	225
Ile	Pro	Glu	Lys	Val	Thr	Pro	Met	Ala	Ala	Ile	Gln	Asp	Gly	Leu	230	235	240
Ala	Lys	Gly	Glu	Asn	Asp	Glu	Thr	Val	Ser	Asn	Thr	Leu	Thr	Leu	245	250	255
Thr	Asn	Gly	Leu	Glu	Arg	Arg	Thr	Lys	Thr	Tyr	Ser	Glu	Asp	Asn	260	265	270
Phe	Glu	Glu	Leu	Gln	Tyr	Phe	Pro	Asn	Phe	Tyr	Ala	Leu	Leu	Lys	275	280	285
Ser	Ile	Asp	Ser	Glu	Lys	Glu	Ala	Lys	Glu	Lys	Glu	Thr	Leu	Ile	290	295	300
Thr	Ile	Met	Lys	Thr	Leu	Ile	Asp	Phe	Val	Lys	Met	Met	Val	Lys	305	310	315
Tyr	Gly	Thr	Ile	Ser	Pro	Glu	Glu	Gly	Val	Ser	Tyr	Leu	Glu	Asn	320	325	330
Leu	Asp	Glu	Met	Ile	Ala	Leu	Gln	Thr	Lys	Asn	Lys	Leu	Glu	Lys	335	340	345

Asn	Ala	Thr	Asp	Asn	Ile	Ser	Lys	Leu	Phe	Pro	Ala	Pro	Ser	Glu	
				350					355					360	
Lys	Ser	His	Glu	Glu	Thr	Asp	Ser	Thr	Lys	Glu	Glu	Ala	Ala	Lys	
				365					370					375	
Met	Glu	Lys	Glu	Tyr	Gly	Ser	Leu	Lys	Asp	Ser	Thr	Lys	Asp	Asp	
				380					385					390	
Asn	Ser	Asn	Pro	Gly	Gly	Lys	Thr	Asp	Glu	Pro	Lys	Gly	Lys	Thr	
				395					400					405	
Glu	Ala	Tyr	Leu	Glu	Ala	Ile	Arg	Lys	Asn	Ile	Glu	Trp	Leu	Lys	
				410					415					420	
Lys	His	Asp	Lys	Lys	Gly	Asn	Lys	Glu	Asp	Tyr	Asp	Leu	Ser	Lys	
				425					430					435	
Met	Arg	Asp	Phe	Ile	Asn	Lys	Gln	Ala	Asp	Ala	Tyr	Val	Glu	Lys	
				440					445					450	
Gly	Ile	Leu	Asp	Lys	Glu	Glu	Ala	Glu	Ala	Ile	Lys	Arg	Ile	Tyr	
				455					460					465	

Ser Ser Leu

<210> 151
 <211> 2598
 <212> DNA
 <213> Homo Sapien

<400> 151
 cggctcgagg ctcccgccag gagaaaggaa cattctgagg ggagtctaca 50
 ccctgtggag ctcaagatgg tcctgagtgg ggcgctgtgc ttccgaatga 100
 aggactcggc attgaaggtg ctttatctgc ataataacca gcttctagct 150
 ggagggctgc atgcagggaa ggtcattaaa ggtgaagaga tcagcgtggt 200
 ccccaatcgg tggctggatg ccagcctgtc ccccgctcgc ctgggtgtcc 250
 aggggtggaag ccagtgcctg tcatgtgggg tggggcagga gccgactcta 300
 aactagagc cagtgaacat catggagctc tatcttggtg ccaagggaatc 350
 caagagcttc accttctacc ggcgggacat ggggctcacc tccagcttcg 400
 agtcggctgc ctaccgggc tggttcctgt gcacgggtgcc tgaagccgat 450
 cagcctgtca gactcaccca gcttcccag aatggtggct ggaatgcccc 500
 catcacagac ttctacttcc agcagtgtga ctagggcaac gtgcccccca 550
 gaactccctg ggcagagcca gctcgggtga ggggtgagtg gaggagaccc 600
 atggcggaca atcactctct ctgctctcag gacccccacg tctgacttag 650
 tgggcacctg accactttgt cttctggttc ccagtttga taaattctga 700
 gatttgagc tcagtccacg gtctctcccc actggatggt gctactgctg 750

tggAACcttg taaaaaccat gtgggggtaaa ctgggaataa catgaaaaga 800
 tttctgtggg ggtgggggtgg gggagtgggtg ggaatcattc ctgcttaatg 850
 gtaactgaca agtggttacc tgagccccgc aggccaaacc atccccagtt 900
 gagccttata gggtcagtag ctctccacat gaagtcctgt cactcaccac 950
 tgtgcaggag agggaggtgg tcatagagtc agggatctat ggcccttggc 1000
 ccagccccac ccccttcctt ttaatcctgc cactgtcata tgctaccttt 1050
 cctatctctt cctcatcat cttgttgtgg gcatgaggag gtggtgatgt 1100
 cagaagaaat ggctcgagct cagaagataa aagataagta gggtagctg 1150
 atcctctttt aaaaacccaa gataacaatca aaatcccaga tgctgggtctc 1200
 tattcccatg aaaaagtgt catgacatat tgagaagacc tacttacaaa 1250
 gtggcatata ttgcaattta ttttaattaa aagataccta tttatatatt 1300
 tctttataga aaaaagtctg gaagagttta cttcaattgt agcaatgtca 1350
 ggggtgggtgg agtatagggtg atttttcttt taattctgtt aatttatctg 1400
 tatttcctaa tttttctaca atgaagatga attccttgta taaaaataag 1450
 aaaagaaatt aatcttgagg taagcagagc agacatcatc tctgattgtc 1500
 ctcagcctcc acttccccag agtaaattca aattgaatcg agctctgctg 1550
 ctctgggttg ttgtagtagt gatcaggaaa cagatctcag caaagccact 1600
 gaggaggagg ctgtgctgag tttgtgtggc tggaatctct gggtaaggaa 1650
 cttaaagaac aaaaatcatc tggttaattct ttctagaag gatcacagcc 1700
 cctgggattc caaggcattg gatccagtct ctaagaaggc tgctgtactg 1750
 gttgaattgt gtccccctca aattcacatc cttcttggaa tctcagtctg 1800
 tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850
 gtcattgctgg atgaaggtag acctaaattc aatatgactg gtttccttgt 1900
 atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950
 aagatgaagg cagagatcgg agttttgcag ccacaagcta agaaacacca 2000
 aggattgtgg caaccatcag aagcttggaa gaggcaaaga agaattcttc 2050
 cctagaggct ttagagggat aacggctctg ctgaaacctt aatctcagac 2100
 ttccagctc ctgaacgaag aaagaataaa tttcggctgt ttttaagccac 2150
 caaggataat tggttacagc agctctagga aactaataca gctgctaaaa 2200
 tgatccctgt ctctctgtgt ttacattctg tgtgtgtccc ctcccacaat 2250
 gtaccaaagt tgtctttgtg accaatagaa tatggcagaa gtgatggcat 2300
 gccacttcca agattaggtt ataaaagaca ctgcagcttc tacttgagcc 2350

ctctctctct gccacccacc gcccaccaatc tatcttggct cactcgctct 2400
 gggggaagct agctgccatg ctatgagcag gcctataaag agacttacgt 2450
 ggtaaaaaat gaagtctcct gccacagcc acattagtga acctagaagc 2500
 agagactctg tgagataatc gatgtttggt gttttaagtt gctcagtttt 2550
 ggtctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152
 <211> 155
 <212> PRT
 <213> Homo Sapien

<400> 152
 Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala
 1 5 10 15
 Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly
 20 25 30
 Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val
 35 40 45
 Pro Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly
 50 55 60
 Val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu
 65 70 75
 Pro Thr Leu Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu
 80 85 90
 Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met
 95 100 105
 Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe
 110 115 120
 Leu Cys Thr Val Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln
 125 130 135
 Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro Ile Thr Asp Phe Tyr
 140 145 150
 Phe Gln Gln Cys Asp
 155

<210> 153
 <211> 1152
 <212> DNA
 <213> Homo Sapien

<400> 153
 cttcagaaca gggtctcctt cccagtcac cagttgctcg agttagaatt 50
 gtctgcaatg gccgccctgc agaaatctgt gagctctttc cttatgggga 100
 ccctggccac cagctgcctc cttctcttgg ccctcttggt acagggagga 150
 gcagctgcgc ccatcagctc cactgcagg cttgacaagt ccaacttcca 200

gcagccctat atcaccaacc gcaccttcat gctggctaag gaggctagct 250
 tggttgataa caacacagac gttcgtctca ttggggagaa actgttccac 300
 ggagtcagta tgagtgagcg ctgctatctg atgaagcagg tgctgaactt 350
 cacccttgaa gaagtgctgt tccctcaatc tgatagggtc cagccttata 400
 tgcaggaggt ggtgcccttc ctggccaggc tcagcaacag gctaagcaca 450
 tgtcatattg aaggtgatga cctgcatatc cagaggaatg tgcaaaagct 500
 gaaggacaca gtgaaaaagc ttggagagag tggagagatc aaagcaattg 550
 gagaactgga tttgctgttt atgtctctga gaaatgcctg catttgacca 600
 gagcaaagct gaaaaatgaa taactaacc cctttccctg ctagaaataa 650
 caattagatg ccccaaagcg atttttttta accaaaagga agatgggaag 700
 ccaaactcca tcatgatggg tggattccaa atgaaccctc gcgtagtta 750
 caaaggaaac caatgccact tttgtttata agaccagaag gtagactttc 800
 taagcataga tatttattga taacatttca ttgtaactgg tgttctatac 850
 acagaaaaca atttattttt taaataattg tctttttcca taaaaaagat 900
 tactttccat tcctttaggg gaaaaaaccc ctaaatagct tcatgtttcc 950
 ataatcagta ctttatattt ataaatgtat ttattattat tataagactg 1000
 cattttattt atatcatttt attaatatgg atttatttat agaaacatca 1050
 ttcgatattg ctacttgagt gtaaggctaa tattgatatt tatgacaata 1100
 attatagagc tataacatgt ttatttgacc tcaataaaca cttggatata 1150
 cc 1152

<210> 154
 <211> 179
 <212> PRT
 <213> Homo Sapien

<400> 154
 Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr
 1 5 10 15
 Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly
 20 25 30
 Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser
 35 40 45
 Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
 50 55 60
 Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
 65 70 75
 Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr
 80 85 90

Leu	Met	Lys	Gln	Val	Leu	Asn	Phe	Thr	Leu	Glu	Glu	Val	Leu	Phe	95	100	105
Pro	Gln	Ser	Asp	Arg	Phe	Gln	Pro	Tyr	Met	Gln	Glu	Val	Val	Pro	110	115	120
Phe	Leu	Ala	Arg	Leu	Ser	Asn	Arg	Leu	Ser	Thr	Cys	His	Ile	Glu	125	130	135
Gly	Asp	Asp	Leu	His	Ile	Gln	Arg	Asn	Val	Gln	Lys	Leu	Lys	Asp	140	145	150
Thr	Val	Lys	Lys	Leu	Gly	Glu	Ser	Gly	Glu	Ile	Lys	Ala	Ile	Gly	155	160	165
Glu	Leu	Asp	Leu	Leu	Phe	Met	Ser	Leu	Arg	Asn	Ala	Cys	Ile		170	175	

<210> 155
 <211> 1320
 <212> DNA
 <213> Homo Sapien

<400> 155
 ggcttgctga aaataaaatc aggactccta acctgctcca gtcagcctgc 50
 ttccacgagg cctgtcagtc agtgcccgac ttgtgactga gtgtgcagtg 100
 cccagcatgt accaggctcag tgcagagggc tgctgagggg ctgtgctgag 150
 agggagagga gcagagatgc tgctgagggg ggagggaggc caagctgcca 200
 gggttggggc tgggggcca gtggagttag aaactgggat cccaggggga 250
 gggtgcagat gagggagcga cccagattag gtgaggacag ttctctcatt 300
 agccttttcc tacagggtgtg tgcattcttg gcaatgggtca tgggaaccca 350
 cacctacagc cactggccca gctgctgccc cagcaaaggg caggacacct 400
 ctgaggagct gctgaggtgg agcactgtgc ctgtgctcc cctagagcct 450
 gctaggccca accgccacc agagtcctgt agggccagtg aagatggacc 500
 cctcaacagc agggccatct cccctggag atatgagttg gacagagact 550
 tgaaccggct ccccaggac ctgtaccacg cccgttgct gtgcccgcac 600
 tgcgtcagcc tacagacagg ctcccacatg gacccccggg gcaactcgga 650
 gctgctctac cacaaccaga ctgtcttcta caggcggcca tgccatggcg 700
 agaagggcac ccacaagggc tactgcctgg agcgcaggct gtaccgtgtt 750
 tccttagctt gtgtgtgtgt gcggccccgt gtgatgggct agccggacct 800
 gctggaggct ggtccctttt tgggaaacct ggagccaggt gtacaaccac 850
 ttgccatgaa gggccaggat gccagatgc ttggcccctg tgaagtgctg 900
 tctggagcag caggatcccc ggacaggatg gggggctttg gggaaaacct 950
 gcacttctgc acattttgaa aagagcagct gctgcttagg gccgccggaa 1000

gctgggtgtcc tgtcattttc tctcaggaaa ggttttcaaa gttctgcca 1050
 tttctggagg ccaccactcc tgtctcttcc tcttttccca tcccctgcta 1100
 ccctggccca gcacaggcac tttctagata tttccccctt gctggagaag 1150
 aaagagcccc tggttttatt tgtttgttta ctcatcactc agtgagcatc 1200
 tactttgggt gcattctagt gtagttacta gtcttttgac atggatgatt 1250
 ctgaggagga agctgttatt gaatgtatag agatttatcc aaataaatat 1300
 ctttatttaa aaatgaaaaa 1320

<210> 156
 <211> 177
 <212> PRT
 <213> Homo Sapien

<400> 156
 Met Arg Glu Arg Pro Arg Leu Gly Glu Asp Ser Ser Leu Ile Ser
 1 5 10 15
 Leu Phe Leu Gln Val Val Ala Phe Leu Ala Met Val Met Gly Thr
 20 25 30
 His Thr Tyr Ser His Trp Pro Ser Cys Cys Pro Ser Lys Gly Gln
 35 40 45
 Asp Thr Ser Glu Glu Leu Leu Arg Trp Ser Thr Val Pro Val Pro
 50 55 60
 Pro Leu Glu Pro Ala Arg Pro Asn Arg His Pro Glu Ser Cys Arg
 65 70 75
 Ala Ser Glu Asp Gly Pro Leu Asn Ser Arg Ala Ile Ser Pro Trp
 80 85 90
 Arg Tyr Glu Leu Asp Arg Asp Leu Asn Arg Leu Pro Gln Asp Leu
 95 100 105
 Tyr His Ala Arg Cys Leu Cys Pro His Cys Val Ser Leu Gln Thr
 110 115 120
 Gly Ser His Met Asp Pro Arg Gly Asn Ser Glu Leu Leu Tyr His
 125 130 135
 Asn Gln Thr Val Phe Tyr Arg Arg Pro Cys His Gly Glu Lys Gly
 140 145 150
 Thr His Lys Gly Tyr Cys Leu Glu Arg Arg Leu Tyr Arg Val Ser
 155 160 165
 Leu Ala Cys Val Cys Val Arg Pro Arg Val Met Gly
 170 175

<210> 157
 <211> 1515
 <212> DNA
 <213> Homo Sapien

<400> 157
 ccggcgatgt cgctcgtgct gctaagcctg gccgcgctgt gcaggagcgc 50

cgtacccccga gagccgaccg ttcaatgtgg ctctgaaact gggccatctc 100
 cagagtggat gctacaacat gatctaatacc ccggagactt gagggacctc 150
 cgagtagaac ctgtttacaac tagtggtgca acaggggact attcaatttt 200
 gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
 aggccaccaa gatttggtg acgggcaaaa gcaacttcca gtcctacagc 300
 tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
 tgggtggtaaa tggacatttt cctacatcgg ctccctgta gagctgaaca 400
 cagtctattt cattggggcc cataatatcc ctaatgcaaa tatgaatgaa 450
 gatggccctt ccattgtctgt gaatttcacc tcaccaggct gcctagacca 500
 cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggata 550
 cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
 acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
 tatcatcggg ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
 gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacggtg 750
 cagctgactc catattttcc tacttgtggc agcgactgca tccgacataa 800
 aggaacagtt gtgctctgcc cacaacagc cgctcccttc cctctggata 850
 acaacaaaag caagccggga ggctggetgc ctctcctcct gctgtctctg 900
 ctggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
 cgaaaggatc aagaagactt cttttctac caccacacta ctgccccca 1000
 ttaaggttct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050
 tgttacttca ctgaatttct tcaaaacat tgcagaagtg aggtcctcct 1100
 tgaaaagtgg cagaaaaaga aaatagcaga gatgggtcca gtgcagtggc 1150
 ttgccactca aaagaaggca gcagacaaag tcgtcttctc tctttccaat 1200
 gacgtcaaca gtgtgtgca tggtacctgt ggcaagagcg agggcagtcc 1250
 cagtgagaac tctcaagacc tcttccccct tgcctttaac cttttctgca 1300
 gtgatctaag aagccagatt catctgcaca aatacgtggg ggtctacttt 1350
 agagagattg atacaaaaga cgattacaat gctctcagtg tctgccccaa 1400
 gtaccacctc atgaaggatg ccactgcttt ctgtgcagaa cttctccatg 1450
 tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
 tgctgctcct tgtag 1515

<210> 158
 <211> 502
 <212> PRT

<213> Homo Sapien

<400> 158

Met	Ser	Leu	Val	Leu	Leu	Ser	Leu	Ala	Ala	Leu	Cys	Arg	Ser	Ala	
1				5					10					15	
Val	Pro	Arg	Glu	Pro	Thr	Val	Gln	Cys	Gly	Ser	Glu	Thr	Gly	Pro	
				20					25					30	
Ser	Pro	Glu	Trp	Met	Leu	Gln	His	Asp	Leu	Ile	Pro	Gly	Asp	Leu	
				35					40					45	
Arg	Asp	Leu	Arg	Val	Glu	Pro	Val	Thr	Thr	Ser	Val	Ala	Thr	Gly	
				50					55					60	
Asp	Tyr	Ser	Ile	Leu	Met	Asn	Val	Ser	Trp	Val	Leu	Arg	Ala	Asp	
				65					70					75	
Ala	Ser	Ile	Arg	Leu	Leu	Lys	Ala	Thr	Lys	Ile	Cys	Val	Thr	Gly	
				80					85					90	
Lys	Ser	Asn	Phe	Gln	Ser	Tyr	Ser	Cys	Val	Arg	Cys	Asn	Tyr	Thr	
				95					100					105	
Glu	Ala	Phe	Gln	Thr	Gln	Thr	Arg	Pro	Ser	Gly	Gly	Lys	Trp	Thr	
				110					115					120	
Phe	Ser	Tyr	Ile	Gly	Phe	Pro	Val	Glu	Leu	Asn	Thr	Val	Tyr	Phe	
				125					130					135	
Ile	Gly	Ala	His	Asn	Ile	Pro	Asn	Ala	Asn	Met	Asn	Glu	Asp	Gly	
				140					145					150	
Pro	Ser	Met	Ser	Val	Asn	Phe	Thr	Ser	Pro	Gly	Cys	Leu	Asp	His	
				155					160					165	
Ile	Met	Lys	Tyr	Lys	Lys	Lys	Cys	Val	Lys	Ala	Gly	Ser	Leu	Trp	
				170					175					180	
Asp	Pro	Asn	Ile	Thr	Ala	Cys	Lys	Lys	Asn	Glu	Glu	Thr	Val	Glu	
				185					190					195	
Val	Asn	Phe	Thr	Thr	Thr	Pro	Leu	Gly	Asn	Arg	Tyr	Met	Ala	Leu	
				200					205					210	
Ile	Gln	His	Ser	Thr	Ile	Ile	Gly	Phe	Ser	Gln	Val	Phe	Glu	Pro	
				215					220					225	
His	Gln	Lys	Lys	Gln	Thr	Arg	Ala	Ser	Val	Val	Ile	Pro	Val	Thr	
				230					235					240	
Gly	Asp	Ser	Glu	Gly	Ala	Thr	Val	Gln	Leu	Thr	Pro	Tyr	Phe	Pro	
				245					250					255	
Thr	Cys	Gly	Ser	Asp	Cys	Ile	Arg	His	Lys	Gly	Thr	Val	Val	Leu	
				260					265					270	
Cys	Pro	Gln	Thr	Gly	Val	Pro	Phe	Pro	Leu	Asp	Asn	Asn	Lys	Ser	
				275					280					285	
Lys	Pro	Gly	Gly	Trp	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Val	
				290					295					300	

Ala Thr Trp Val	Leu Val Ala Gly Ile	Tyr Leu Met Trp Arg His
305		310 315
Glu Arg Ile Lys	Lys Thr Ser Phe Ser	Thr Thr Thr Leu Leu Pro
320		325 330
Pro Ile Lys Val	Leu Val Val Tyr Pro	Ser Glu Ile Cys Phe His
335		340 345
His Thr Ile Cys	Tyr Phe Thr Glu Phe	Leu Gln Asn His Cys Arg
350		355 360
Ser Glu Val Ile	Leu Glu Lys Trp Gln	Lys Lys Lys Ile Ala Glu
365		370 375
Met Gly Pro Val	Gln Trp Leu Ala Thr	Gln Lys Lys Ala Ala Asp
380		385 390
Lys Val Val Phe	Leu Leu Ser Asn Asp	Val Asn Ser Val Cys Asp
395		400 405
Gly Thr Cys Gly	Lys Ser Glu Gly Ser	Pro Ser Glu Asn Ser Gln
410		415 420
Asp Leu Phe Pro	Leu Ala Phe Asn Leu	Phe Cys Ser Asp Leu Arg
425		430 435
Ser Gln Ile His	Leu His Lys Tyr Val	Val Val Tyr Phe Arg Glu
440		445 450
Ile Asp Thr Lys	Asp Asp Tyr Asn Ala	Leu Ser Val Cys Pro Lys
455		460 465
Tyr His Leu Met	Lys Asp Ala Thr Ala	Phe Cys Ala Glu Leu Leu
470		475 480
His Val Lys Gln	Gln Val Ser Ala Gly	Lys Arg Ser Gln Ala Cys
485		490 495
His Asp Gly Cys	Cys Ser Leu	
500		

<210> 159
 <211> 535
 <212> DNA
 <213> Homo Sapien

<400> 159
 agccaccagc gcaacatgac agtgaagacc ctgcatggcc cagccatggt 50
 caagtacttg ctgctgtcga tattggggct tgcctttctg agtgaggcgg 100
 cagctcggaa aatccccaaa gtaggacata cttttttcca aaagcctgag 150
 agttgcccgc ctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200
 caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250
 cctccccctg gaattacact gtcacttggg accccaaccg gtaccctctg 300
 gaagttgtac aggccagtg taggaacttg ggctgcatca atgctcaagg 350
 aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400

tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450
 gtgctggtga ctgttggctg cacctgcgtc acccctgtca tccaccatgt 500
 gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160
 <211> 163
 <212> PRT
 <213> Homo Sapien

<400> 160
 Met Thr Val Lys Thr Leu His Gly Pro Ala Met Val Lys Tyr Leu
 1 5 10 15
 Leu Leu Ser Ile Leu Gly Leu Ala Phe Leu Ser Glu Ala Ala Ala
 20 25 30
 Arg Lys Ile Pro Lys Val Gly His Thr Phe Phe Gln Lys Pro Glu
 35 40 45
 Ser Cys Pro Pro Val Pro Gly Gly Ser Met Lys Leu Asp Ile Gly
 50 55 60
 Ile Ile Asn Glu Asn Gln Arg Val Ser Met Ser Arg Asn Ile Glu
 65 70 75
 Ser Arg Ser Thr Ser Pro Trp Asn Tyr Thr Val Thr Trp Asp Pro
 80 85 90
 Asn Arg Tyr Pro Ser Glu Val Val Gln Ala Gln Cys Arg Asn Leu
 95 100 105
 Gly Cys Ile Asn Ala Gln Gly Lys Glu Asp Ile Ser Met Asn Ser
 110 115 120
 Val Pro Ile Gln Gln Glu Thr Leu Val Val Arg Arg Lys His Gln
 125 130 135
 Gly Cys Ser Val Ser Phe Gln Leu Glu Lys Val Leu Val Thr Val
 140 145 150
 Gly Cys Thr Cys Val Thr Pro Val Ile His His Val Gln
 155 160

<210> 161
 <211> 2380
 <212> DNA
 <213> Homo Sapien

<400> 161
 acactggcca aacaaaaaacg aaagcactcc gtgctggaag taggaggaga 50
 gtcaggactc ccaggacaga gagtgcacaa actaccacagc acagccccct 100
 ccgccccctc tggaggctga agagggattc cagccccctgc caccacaga 150
 cacgggctga ctgggggtgtc tgccccctt gggggggggc agcacagggc 200
 ctcaggcctg ggtgccacct ggcacctaga agatgcctgt gccctgggtc 250
 ttgctgtcct tggcactggg ccgaagccca gtggtccttt ctctggagag 300

gcttgtgggg cctcaggacg ctacccactg ctctccgggc ctctcctgcc 350
gcctctggga cagtgcata ctctgcctgc ctggggacat cgtgcctgct 400
ccgggccccg tgctggcgcc tacgcacctg cagacagagc tgggtgctgag 450
gtgccagaag gagaccgact gtgacctctg tctgcgtgtg gctgtccact 500
tggccgtgca tgggcactgg gaagagcctg aagatgagga aaagtgttga 550
ggagcagctg actcaggggt ggaggagcct aggaatgcct ctctccagge 600
ccaagtctg ctctccttcc aggcctaccc tactgcccgc tgcgtcctgc 650
tggaggtgca agtgccctgct gcccttgtgc agtttggtca gtctgtgggc 700
tctgtggtat atgactgctt cgaggctgcc ctaggagtg aggtacgaat 750
ctggtcctat actcagccca ggtacgagaa ggaactcaac cacacacagc 800
agctgcctgc cctgccctgg ctcaacgtgt cagcagatgg tgacaacgtg 850
catctgggtc tgaatgtctc tgaggagcag cacttcggcc tctccctgta 900
ctggaatcag gtccagggcc ccccaaaacc ccggtggcac aaaaacctga 950
ctggaccgca gatcattacc ttgaaccaca cagacctggt tccctgcctc 1000
tgtattcagg tgtggcctct ggaacctgac tccgttagga cgaacatctg 1050
ccccttcagg gaggaccccc gcgcacacca gaacctctgg caagccgccc 1100
gactgcgact gctgacctg cagagctggc tgctggacgc accgtgctcg 1150
ctgcccgcag aagcggcact gtgctggcgg gctccgggtg gggacctctg 1200
ccagccactg gtcccaccgc tttcctggga gaacgtcact gtggacaagg 1250
ttctcgagtt ccatttgctg aaaggccacc ctaacctctg tgttcagggtg 1300
aacagctcgg agaagctgca gctgcaggag tgcttgtggg ctgactccct 1350
ggggcctctc aaagacgatg tgctactgtt ggagacacga ggcccccagg 1400
acaacagatc cctctgtgcc ttggaaccca gtggctgtac ttcactacc 1450
agcaaagcct ccacgagggc agctcgcctt ggagagtact tactacaaga 1500
cctgcagtca ggccagtgtc tgcagctatg ggacgatgac ttgggagcgc 1550
tatgggcctg ccccatggac aaatacatcc acaagcgctg ggccctcgtg 1600
tggctggcct gcctactctt tgccgctgcg ctttccctca tcctccttct 1650
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gctcgggggc ggccgccagg ggccgcgcgg ctctgctcct ctactcagcc 1750
gatgactcgg gtttcgagcg cctgggtggc gccctggcgt cggccctgtg 1800
ccagctgccg ctgcgcgtgg ccgtagacct gtggagccgt cgtgaactga 1850
gcgcgcaggg gcccggtggt tggtttcacg cgcagcggcg ccagaccctg 1900

caggagggcg gcgtggtggt cttgctcttc tctcccgggtg cgggtggcgct 1950
 gtgcagcgag tggctacagg atgggggtgtc cgggcccggg gcgcacggcc 2000
 cgcacgacgc cttccgcgcc tcgctcagct gcgtgctgcc cgacttcttg 2050
 cagggccggg cggccggcag ctacgtgggg gcctgcttcg acaggctgct 2100
 ccacccggac gccgtaccgc cccttttccg caccgtgccc gtcttcacac 2150
 tgccctccca actgccagac ttcttggggg ccctgcagca gcctcgcgcc 2200
 ccgcgttccg ggcgggtcca agagagagcg gagcaagtgt cccgggcccct 2250
 tcagccagcc ctggatagct acttccatcc cccggggact cccgcgcggg 2300
 gacgcgggggt gggaccaggg gcgggacctg gggcggggga cgggacttaa 2350
 ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162
 <211> 705
 <212> PRT
 <213> Homo Sapien

<400> 162
 Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser
 1 5 10 15
 Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala
 20 25 30
 Thr His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp
 35 40 45
 Ile Leu Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val
 50 55 60
 Leu Ala Pro Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln
 65 70 75
 Lys Glu Thr Asp Cys Asp Leu Cys Leu Arg Val Ala Val His Leu
 80 85 90
 Ala Val His Gly His Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe
 95 100 105
 Gly Gly Ala Ala Asp Ser Gly Val Glu Glu Pro Arg Asn Ala Ser
 110 115 120
 Leu Gln Ala Gln Val Val Leu Ser Phe Gln Ala Tyr Pro Thr Ala
 125 130 135
 Arg Cys Val Leu Leu Glu Val Gln Val Pro Ala Ala Leu Val Gln
 140 145 150
 Phe Gly Gln Ser Val Gly Ser Val Val Tyr Asp Cys Phe Glu Ala
 155 160 165
 Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr Thr Gln Pro Arg
 170 175 180
 Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro Ala Leu Pro

	185	190	195
Trp Leu Asn Val	Ser Ala Asp Gly Asp	Asn Val His Leu Val	Leu
	200	205	210
Asn Val Ser Glu	Glu Gln His Phe Gly	Leu Ser Leu Tyr Trp	Asn
	215	220	225
Gln Val Gln Gly	Pro Pro Lys Pro Arg	Trp His Lys Asn Leu Thr	
	230	235	240
Gly Pro Gln Ile	Ile Thr Leu Asn His	Thr Asp Leu Val Pro	Cys
	245	250	255
Leu Cys Ile Gln	Val Trp Pro Leu Glu	Pro Asp Ser Val Arg	Thr
	260	265	270
Asn Ile Cys Pro	Phe Arg Glu Asp Pro	Arg Ala His Gln Asn	Leu
	275	280	285
Trp Gln Ala Ala	Arg Leu Arg Leu Leu	Thr Leu Gln Ser Trp	Leu
	290	295	300
Leu Asp Ala Pro	Cys Ser Leu Pro Ala	Glu Ala Ala Leu Cys	Trp
	305	310	315
Arg Ala Pro Gly	Gly Asp Pro Cys Gln	Pro Leu Val Pro Pro	Leu
	320	325	330
Ser Trp Glu Asn	Val Thr Val Asp Lys	Val Leu Glu Phe Pro	Leu
	335	340	345
Leu Lys Gly His	Pro Asn Leu Cys Val	Gln Val Asn Ser Ser	Glu
	350	355	360
Lys Leu Gln Leu	Gln Glu Cys Leu Trp	Ala Asp Ser Leu Gly	Pro
	365	370	375
Leu Lys Asp Asp	Val Leu Leu Leu Glu	Thr Arg Gly Pro Gln	Asp
	380	385	390
Asn Arg Ser Leu	Cys Ala Leu Glu Pro	Ser Gly Cys Thr Ser	Leu
	395	400	405
Pro Ser Lys Ala	Ser Thr Arg Ala Ala	Arg Leu Gly Glu Tyr	Leu
	410	415	420
Leu Gln Asp Leu	Gln Ser Gly Gln Cys	Leu Gln Leu Trp Asp	Asp
	425	430	435
Asp Leu Gly Ala	Leu Trp Ala Cys Pro	Met Asp Lys Tyr Ile	His
	440	445	450
Lys Arg Trp Ala	Leu Val Trp Leu Ala	Cys Leu Leu Phe Ala	Ala
	455	460	465
Ala Leu Ser Leu	Ile Leu Leu Leu Lys	Lys Asp His Ala Lys	Gly
	470	475	480
Trp Leu Arg Leu	Leu Lys Gln Asp Val	Arg Ser Gly Ala Ala	Ala
	485	490	495
Arg Gly Arg Ala	Ala Leu Leu Leu Tyr	Ser Ala Asp Asp Ser	Gly

500					505					510				
Phe	Glu	Arg	Leu	Val	Gly	Ala	Leu	Ala	Ser	Ala	Leu	Cys	Gln	Leu
				515					520					525
Pro	Leu	Arg	Val	Ala	Val	Asp	Leu	Trp	Ser	Arg	Arg	Glu	Leu	Ser
				530					535					540
Ala	Gln	Gly	Pro	Val	Ala	Trp	Phe	His	Ala	Gln	Arg	Arg	Gln	Thr
				545					550					555
Leu	Gln	Glu	Gly	Gly	Val	Val	Val	Leu	Leu	Phe	Ser	Pro	Gly	Ala
				560					565					570
Val	Ala	Leu	Cys	Ser	Glu	Trp	Leu	Gln	Asp	Gly	Val	Ser	Gly	Pro
				575					580					585
Gly	Ala	His	Gly	Pro	His	Asp	Ala	Phe	Arg	Ala	Ser	Leu	Ser	Cys
				590					595					600
Val	Leu	Pro	Asp	Phe	Leu	Gln	Gly	Arg	Ala	Pro	Gly	Ser	Tyr	Val
				605					610					615
Gly	Ala	Cys	Phe	Asp	Arg	Leu	Leu	His	Pro	Asp	Ala	Val	Pro	Ala
				620					625					630
Leu	Phe	Arg	Thr	Val	Pro	Val	Phe	Thr	Leu	Pro	Ser	Gln	Leu	Pro
				635					640					645
Asp	Phe	Leu	Gly	Ala	Leu	Gln	Gln	Pro	Arg	Ala	Pro	Arg	Ser	Gly
				650					655					660
Arg	Leu	Gln	Glu	Arg	Ala	Glu	Gln	Val	Ser	Arg	Ala	Leu	Gln	Pro
				665					670					675
Ala	Leu	Asp	Ser	Tyr	Phe	His	Pro	Pro	Gly	Thr	Pro	Ala	Pro	Gly
				680					685					690
Arg	Gly	Val	Gly	Pro	Gly	Ala	Gly	Pro	Gly	Ala	Gly	Asp	Gly	Thr
				695					700					705

<210> 163
 <211> 2478
 <212> DNA
 <213> Homo Sapien

<400> 163
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 tctgcagcac actaccctca agccacctga tgtgacctgt atctccaaag 100
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 ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200
 ccacttagag ctccaggtca accgcaccta ccaaattgcac cttggaggga 250
 agcagagaga atatgagttc ttcggcctga cccctgacac agagttcctt 300
 ggccaccatca tgattttcgt tcccacctgg gcccaaggaga gtgcccccta 350
 catgtgccga gtgaagacac tgccagaccg gacatggacc tactccttct 400

ccggagcctt cctgttctcc atgggcttcc tegtgcgagt actctgctac 450
 ctgagctaca gatatgtcac caagccgcct gcacctccca actccctgaa 500
 cgtccagcga gtectgactt tccagccgct gcgcttcac caggagcacg 550
 tectgatccc tgtctttgac ctacagcgcc ccagcagtct ggcccagcct 600
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 tccacagcgg catagcctgt ccgagatcac ctacttaggg cagccagaca 700
 tctccatcct ccagccctcc aacgtgccac ctccccagat cctctcccca 750
 ctgtcctatg ccccaaacgc tgcccctgag gtcggggccc catcctatgc 800
 acctcaggtg acccccgaag ctcaattccc attctacgcc ccacaggcca 850
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 tggcctccct cctatggggg atgcatggaa ggttctggca aagactcccc 950
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 gagacctcag acctggagca gccacagaa ctggattctc ttttcagagg 1400
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 gtgcttctc cctgtcccta ccagtgta catccttggc tgtcaatccc 1500
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 agggagacac acaagccttt tctgcaggca ggagtttcag accctatcct 2150
 gagaatgggg tttgaaagga aggtgagggc tgtggcccct ggacgggtac 2200
 aataacacac tgtactgatg tcacaacttt gcaagctctg ccttgggttc 2250
 agcccatctg ggctcaaatt ccagcctcac cactcacaag ctgtgtgact 2300
 tcaaacaaat gaaatcagtg ccagaaacct cggtttcctc atctgtaatg 2350
 tggggatcat aacacctacc tcatggagtt gtggtgaaga tgaaatgaag 2400
 tcatgtcttt aaagtgctta atagtgcctg gtacatgggc agtgcccaat 2450
 aaacggtagc tatttaaaaa aaaaaaaa 2478

<210> 164
 <211> 574
 <212> PRT
 <213> Homo Sapien

<400> 164
 Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala
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 His Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe
 20 25 30
 Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro
 35 40 45
 Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr
 50 55 60
 Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr
 65 70 75
 Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu
 80 85 90
 Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser
 95 100 105
 Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr
 110 115 120
 Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile
 125 130 135
 Gln Met Ile Val His Pro Thr Pro Thr Pro Ile Arg Ala Gly Asp
 140 145 150
 Gly His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr
 155 160 165
 His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly
 170 175 180
 Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr

185					190					195				
Glu	Phe	Leu	Gly	Thr	Ile	Met	Ile	Cys	Val	Pro	Thr	Trp	Ala	Lys
				200					205					210
Glu	Ser	Ala	Pro	Tyr	Met	Cys	Arg	Val	Lys	Thr	Leu	Pro	Asp	Arg
				215					220					225
Thr	Trp	Thr	Tyr	Ser	Phe	Ser	Gly	Ala	Phe	Leu	Phe	Ser	Met	Gly
				230					235					240
Phe	Leu	Val	Ala	Val	Leu	Cys	Tyr	Leu	Ser	Tyr	Arg	Tyr	Val	Thr
				245					250					255
Lys	Pro	Pro	Ala	Pro	Pro	Asn	Ser	Leu	Asn	Val	Gln	Arg	Val	Leu
				260					265					270
Thr	Phe	Gln	Pro	Leu	Arg	Phe	Ile	Gln	Glu	His	Val	Leu	Ile	Pro
				275					280					285
Val	Phe	Asp	Leu	Ser	Gly	Pro	Ser	Ser	Leu	Ala	Gln	Pro	Val	Gln
				290					295					300
Tyr	Ser	Gln	Ile	Arg	Val	Ser	Gly	Pro	Arg	Glu	Pro	Ala	Gly	Ala
				305					310					315
Pro	Gln	Arg	His	Ser	Leu	Ser	Glu	Ile	Thr	Tyr	Leu	Gly	Gln	Pro
				320					325					330
Asp	Ile	Ser	Ile	Leu	Gln	Pro	Ser	Asn	Val	Pro	Pro	Pro	Gln	Ile
				335					340					345
Leu	Ser	Pro	Leu	Ser	Tyr	Ala	Pro	Asn	Ala	Ala	Pro	Glu	Val	Gly
				350					355					360
Pro	Pro	Ser	Tyr	Ala	Pro	Gln	Val	Thr	Pro	Glu	Ala	Gln	Phe	Pro
				365					370					375
Phe	Tyr	Ala	Pro	Gln	Ala	Ile	Ser	Lys	Val	Gln	Pro	Ser	Ser	Tyr
				380					385					390
Ala	Pro	Gln	Ala	Thr	Pro	Asp	Ser	Trp	Pro	Pro	Ser	Tyr	Gly	Val
				395					400					405
Cys	Met	Glu	Gly	Ser	Gly	Lys	Asp	Ser	Pro	Thr	Gly	Thr	Leu	Ser
				410					415					420
Ser	Pro	Lys	His	Leu	Arg	Pro	Lys	Gly	Gln	Leu	Gln	Lys	Glu	Pro
				425					430					435
Pro	Ala	Gly	Ser	Cys	Met	Leu	Gly	Gly	Leu	Ser	Leu	Gln	Glu	Val
				440					445					450
Thr	Ser	Leu	Ala	Met	Glu	Glu	Ser	Gln	Glu	Ala	Lys	Ser	Leu	His
				455					460					465
Gln	Pro	Leu	Gly	Ile	Cys	Thr	Asp	Arg	Thr	Ser	Asp	Pro	Asn	Val
				470					475					480
Leu	His	Ser	Gly	Glu	Glu	Gly	Thr	Pro	Gln	Tyr	Leu	Lys	Gly	Gln
				485					490					495
Leu	Pro	Leu	Leu	Ser	Ser	Val	Gln	Ile	Glu	Gly	His	Pro	Met	Ser

	500		505		510
Leu Pro Leu Gln	Pro Pro Ser Gly	Pro Cys Ser	Pro Ser Asp	Gln	
	515	520		525	
Gly Pro Ser Pro	Trp Gly Leu Leu	Glu Ser Leu Val	Cys Pro	Lys	
	530	535		540	
Asp Glu Ala Lys	Ser Pro Ala Pro	Glu Thr Ser Asp	Leu Glu	Gln	
	545	550		555	
Pro Thr Glu Leu	Asp Ser Leu Phe	Arg Gly Leu Ala	Leu Thr	Val	
	560	565		570	
Gln Trp Glu Ser					

<210> 165
 <211> 1060
 <212> DNA
 <213> Homo Sapien

<400> 165
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 gtggccacaa catggctgcg gcgccggggc tgctcttctg gctgttcgtg 100
 ctggggggcgc tctggtgggt cccggggccag tcggatctca gccacggacg 150
 gcgtttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
 tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
 gtgaatttta aaaaaggtga cgatgtatat gtctactaca aactggcagg 300
 gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
 ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400
 catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
 tgattttaat agttataatg tagaagagct tttaggatct ttggaactgg 500
 aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
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 cagagagcac cgaggggctg caggacagc cctcagctca ggagagccac 700
 cctcacacca gcggtcctgc ggctaacgct cagggagtgc agtcttcgtt 750
 ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800
 aaagcagaac tggcaatagt tctcctgcct cgggtggagcg ggagaagaca 850
 gatgcttaca aagtccctgaa aacagaaatg agtcagagag gaagtggaca 900
 gtgcgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
 tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000

tttgagccaa acaaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050

aaaaaaaaaa 1060

<210> 166

<211> 303

<212> PRT

<213> Homo Sapien

<400> 166

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Phe	Trp	Leu	Phe	Val	Leu	Gly	
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Ala	Leu	Trp	Trp	Val	Pro	Gly	Gln	Ser	Asp	Leu	Ser	His	Gly	Arg	
				20					25					30	
Arg	Phe	Ser	Asp	Leu	Lys	Val	Cys	Gly	Asp	Glu	Glu	Cys	Ser	Met	
				35					40					45	
Leu	Met	Tyr	Arg	Gly	Lys	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp	
				50					55					60	
Cys	Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Asp	Val	Tyr	Val	Tyr	
				65					70					75	
Tyr	Lys	Leu	Ala	Gly	Gly	Ser	Leu	Glu	Leu	Trp	Ala	Gly	Ser	Val	
				80					85					90	
Glu	His	Ser	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Lys	Val	Leu	
				95					100					105	
His	Lys	Tyr	Thr	Glu	Glu	Glu	Leu	His	Ile	Pro	Ala	Asp	Glu	Thr	
				110					115					120	
Asp	Phe	Val	Cys	Phe	Glu	Gly	Gly	Arg	Asp	Asp	Phe	Asn	Ser	Tyr	
				125					130					135	
Asn	Val	Glu	Glu	Leu	Leu	Gly	Ser	Leu	Glu	Leu	Glu	Asp	Ser	Val	
				140					145					150	
Pro	Glu	Glu	Ser	Lys	Lys	Ala	Glu	Glu	Val	Ser	Gln	His	Arg	Glu	
				155					160					165	
Lys	Ser	Pro	Glu	Glu	Ser	Arg	Gly	Arg	Glu	Leu	Asp	Pro	Val	Pro	
				170					175					180	
Glu	Pro	Glu	Ala	Phe	Arg	Ala	Asp	Ser	Glu	Asp	Gly	Glu	Gly	Ala	
				185					190					195	
Phe	Ser	Glu	Ser	Thr	Glu	Gly	Leu	Gln	Gly	Gln	Pro	Ser	Ala	Gln	
				200					205					210	
Glu	Ser	His	Pro	His	Thr	Ser	Gly	Pro	Ala	Ala	Asn	Ala	Gln	Gly	
				215					220					225	
Val	Gln	Ser	Ser	Leu	Asp	Thr	Phe	Glu	Glu	Ile	Leu	His	Asp	Lys	
				230					235					240	
Leu	Lys	Val	Pro	Gly	Ser	Glu	Ser	Arg	Thr	Gly	Asn	Ser	Ser	Pro	
				245					250					255	
Ala	Ser	Val	Glu	Arg	Glu	Lys	Thr	Asp	Ala	Tyr	Lys	Val	Leu	Lys	
				260					265					270	

Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr
 275 280 285

Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys
 290 295 300

Asp Cys Phe

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

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 agagaagcaa agcgcaacgg tgtggtccaa gccgggggctt ctgcttcgcc 100
 tctaggacat acacggggacc ccctaacttc agtcccccaa acgcgcaccc 150
 tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcg 200
 caggcgggcag gtccccggccg aaggcgatgc gcgcaggggg tcgggcagct 250
 gggctcgggc ggcgggagta gggcccggca gggaggcagg gaggctgcat 300
 attcagagtc gcgggctgcg ccctgggcag aggccgccct cgctccacgc 350
 aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgtgct 400
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aactcattga cttggttcca gaattttgta attctggatc tgtataagga 1250
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aagatgaact gtaagctccc ccttgaggca aatattaaag taatttttat 1350
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catgcttatt ttgctaaagg atgcacccaa acttcaaact tcaagcaaat 1450
gaaatggaca atgcagataa agttgttatac aacacgtcgg gagtatgtgt 1500
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<210> 168

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

Met Ser Arg Val Val Ser Leu Leu Leu Gly Ala Ala Leu Leu Cys

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Gly His Gly Ala Phe Cys Arg Arg Val Val Ser Gly Gln Lys Val	20	25	30
Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe	35	40	45
His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala	50	55	60
Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala	65	70	75
Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro	80	85	90
Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg	95	100	105
Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln	110	115	120
Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp	125	130	135
Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln	140	145	150
Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp	155	160	165
Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr	170	175	180
Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu	185	190	195
Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu	200	205	210
Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile	215	220	225
Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe	230	235	240
Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn	245	250	255
Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly	260	265	270
Met Glu Val			

<210> 169

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 169
tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 170

caggaaacag ctatgaccac ctgcacacct gcaaattccat t 41